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TWENTY-FOURTH VOLUME,

FIRST HALF.

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A Dated Gandhāra Figure.—By ALFRED WILLIAM STRATTON,
late Principal of the Oriental College at Lahore, India.

[Alfred William Stratton, the author of the following paper, died in Kashmir in August, 1902. The MS. of the "Dated Gandhāra Figure" was presented to the Society at its annual meeting in April of that year, and but for the fact that the author wished to revise it, would have been published in the twenty-third volume of the Journal. It is apparent that his premature death prevented thorough revision on the part of the author, but the article seems well worthy of publication both as a contribution to science and as a memorial of a promising scholar. Dr. Stratton may have owed his position as Principal of the Oriental College at Lahore, in the Punjab, partly to the fact that he was of English blood, but native worth was the chief factor in determining the choice of an American professor to succeed Dr. Stein. In the short time that elapsed after he gave up his chair at the University of Chicago, to go to India, Dr. Stratton had already proved himself equal to the task assigned him and given evidence of his ability to enter successfully a new field of work. This paper is the first fruit of his brief stay in India—as, unhappily, it is the last.—ED.]

WITH Dr. Vogel, the archaeological surveyor of the Punjab Circle, I spent a few days last April [1901] visiting places of archaeological interest in the Yūsufzai country. In Peshawar, Captain Waterfield, the Deputy Commissioner, showed us some pieces of Gandhāra sculpture which he had recently received from [near]¹ Cārsadda. The largest and altogether the most interesting of these was a figure very much like the one discovered by Colonel Deane at Sikri (and now in the Lahore Museum),

¹ See the note at the end of the article.—ED.

which has been supposed to represent Hārītī. To this the newly-found figure was much inferior in execution, but a dated inscription in Kharoṣṭhī characters marked its importance for the determination of the age of the Gandhāra work. At Dr. Vogel's request, Captain Waterfield readily consented to place it in the Lahore Museum, where it now stands.

Captain Waterfield was unable to learn in what position the figure had been found. Dr. Vogel, however, intends soon to examine the remains in the neighborhood of Cārsadda, and will, no doubt, be able to ascertain the particulars of the discovery. The only inscribed pieces of Gandhāra sculpture hitherto found, the pedestal in the British Museum, of which an excellent photo-etching was given by Mr. Vincent A. Smith, in the *Journal of the Asiatic Society of Bengal*, vol. lviii, plate x, and the pedestal in the Lahore Museum, described by Bühler in the *Indian Antiquary*, vol. xxv, p. 311, are from Cārsadda. It is to be hoped that careful search there will bring to light other dated pieces.

The new figure is cut in the blue slate that was regularly used for the sculptures of the Peshawar valley. The stone is in all four feet three inches long, but nine and a half inches at the base are uncut and must have been built into the structure it adorned: traces of the joining can indeed be seen. The back is plain.

This figure and the one discovered at Sikri evidently deal with the same subject. In each of them there is a child on each shoulder and one at the breast, and each of the children on the shoulders holds in one hand an object which, rudely cut in the new figure, seems in the other to be a pomegranate. In the new figure the woman (or goddess) holds in her right hand a bunch of grapes, to which a vine-leaf clings. Whether or not this would justify us in assuming that the earth-goddess is represented, I do not know. At any rate, it is a feature not characteristic of Hārītī.

Alike in subject, the two figures show little likeness in execution. In the earlier figure, of the children on the shoulders each holds by one hand to the mother's head; the one on the left is supported by the slight raising of her arm as her hand rests on her hip; one foot of the other is placed on the left shoulder of the third child, which she holds in her arm, its right hand cov-

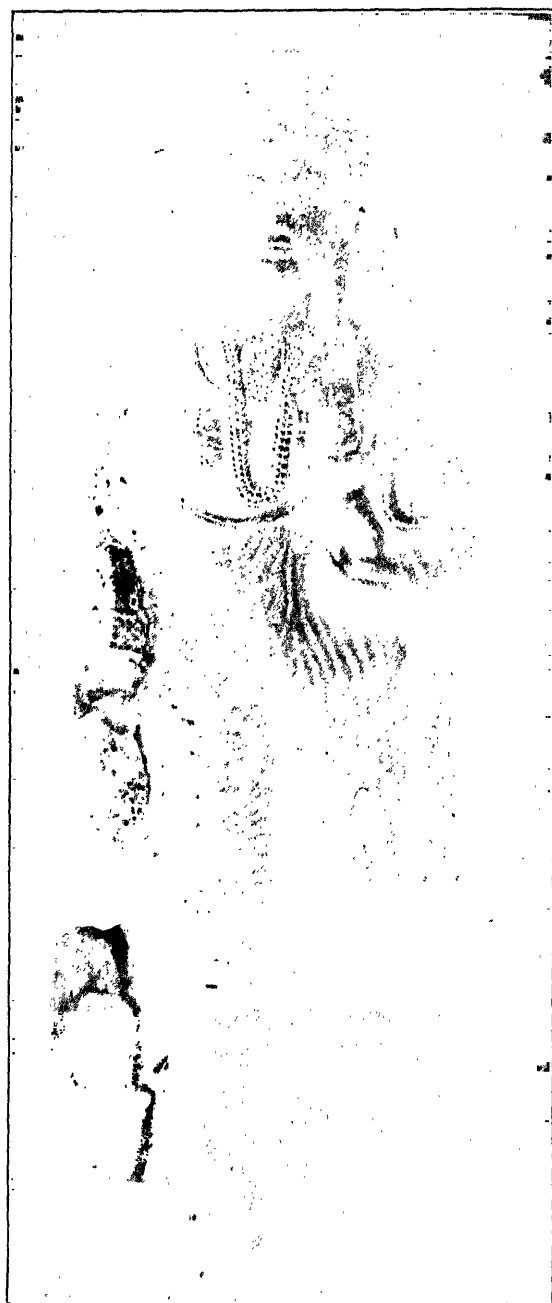


FIG. I., p. 2.

ering the nipple of her right breast and its face turning upward in a natural way. In the new figure the children on the shoulders sit stiffly. Especially unnatural is the position of the one on the left, and one wonders how it can maintain its place on such a sloping seat. The third child buries its head in the mother's left breast, while its hands, raised above its head, lie flat against her garments.

In both figures the children are unnaturally small, but in the new one the disproportion is far greater than in the other. Only in this way, it would seem, could the sculptor indicate that they were children. Their heads, moreover, are small in proportion to their bodies, distinctly smaller in the new than in the earlier figure, where in the case of the child at the breast the head is of a natural size.

There is nothing of the child-look in the face of the one whose features can be clearly seen in the new figure. The hair of the one whose face is turned away falls in a thick mass to the neck, waving outward after a fashion that one sometimes sees now in grown men.

An utter lack of skill is shown in the proportions of the woman's figure. The position of her arms is stiff and unnatural. The draping of the outer garment is most crude: in fact, so far as I know, no other figure in the Lahore Museum is in this respect at all so poor. The workmanship of the Sikri figure is distinctly better: there can be little doubt that it is to be assigned to a much earlier period than the one found at Cārsadda.

In the earlier figure the breast to which the child clings is uncovered, but in the Cārsadda figure, arms and breast show designs that seem to represent a close-fitting sleeved jacket. A similar garment may be seen in the seated figure presented by Colonel Walker to the British Museum, which corresponds closely to I-tsing's description of the figures of Hārītī. The dressing of the hair is another point of resemblance between these two. Here again the new figure suffers by comparison.

Below the left arm is found the inscription of which mention has been made. It is in two lines. The characters in the lower line are for lack of space shorter than those in the upper line, the width, on the other hand, being in general the same throughout. Toward the lower end, the left of the inscription,

the surface of the stone has been slightly cut away, but here also in continuation of the upper line are four or perhaps five Kharoṣṭhī characters. Unfortunately the surface is throughout uneven, and three slight depressions running parallel with the inscription add to the uncertainty of the reading. With regard to several of the characters, especially among those in the lower line, I am in doubt. For the present I give only the following tentative reading of the upper line, which records the date:

VASRA EKUNASĪTASĀTIMAE [or EKĀNAVITASĀTIMAE] AṢADASA MASASA 4 BUDHAVARA

The sixth is one of the uncertain characters. The cutting is not of the same depth throughout. A pointed stick, following the groove in the stone from the lower right hand, stops before reaching the downward curve on the left, so that one might believe that there are two characters. I was at first inclined to read *vi* (*navita* for *navati*), but the likeness to the character in the inscription found by Lieut. Maxwell in 1882 leads me to believe that it should be read *śi*. There is a slight depression to the left of the lower end of the *ka*, which may be the sign of *u*.

Then follows what appears to be a single character. The curve, however, on the right is longer than on any *ha* that I have seen, nor could that syllable be found in the record of the year. I accordingly prefer to regard it as a blending of *ta* and *śa*.

The next character is looped. There can be no doubt, I believe, that it is *ti*. On my impression of the Twelfth Edict of Aśoka at Shāhbāzgarhi I find a similar loop in the character at the end of the second line. The word *śatimae* is clear on the inscription of Guduphara.

Two forms of *sa* occur in the first line; a third, closed as in the inscriptions of Aśoka, is probably to be seen at the end of the inscription.

The surface, uneven everywhere, is particularly rough in the depressed part, where only one line is engraved. The determination of the meaning is very difficult. After much hesitation I now read the word *budhavara*. The first character is more like *va* than *ba*. At the upper end of the second there is traceable on the stone a slight curve to the left which cannot be



Fig. II, p. 4.

seen in the photograph: I judge that *dh* is intended. The third and fourth *va ra* are clear. Beyond these there is a distinct upright cutting, which merges into a shallow curve running upward to the left: this, I judge, cannot belong to the record of the date.

If the above reading is correct, the figure was set up on Wednesday, the 4th of the month Āṣāḍha in the year 179 (or 191). I find no mention of the lunar fortnight in which the reckoning was made. The month is now reckoned in the Punjab from full moon to full moon. This, I presume, may be supposed to have been the practice in the early centuries of our era. The date would then be the fourth day after the full moon.

The inscription found by Dr. Bellew, at Takht-i-Bahāi, records that the year 103 of an unnamed era fell in the twenty-sixth year of the reign of King Guduphara. The beginning of this era cannot be placed much earlier or later than the year 57 B. C., and it may well be that the reckoning was made by the Vikrama era. Nor is there any good evidence that more than one era was referred to in the dated inscriptions of the Gandhāra country. We may yet obtain records that will enable us to determine absolutely whether or not it was the Vikrama era that was adopted in these reckonings.

The first table in Sewell's and Dikshit's "Indian Calendar" does not include calculations for the first three centuries after Christ, but by the use of Professor Jacobi's thirteenth and fourteenth tables in the seventeenth volume of the Indian Antiquary and Sewell's and Dikshit's third table it may be found that the fourth day after the full moon of Āṣāḍha in the (expired) Vikrama year 179 (but not 191) fell on a Wednesday. I must add, however, that I am not at all sure of the correctness of such a calculation, since the results arrived at by that method for later years did not always agree with the calculations of the "Indian Calendar."

Allowing for all the uncertainty there is in the record of the date, it may safely be said that the work was executed not later than the first half of the second century after Christ; that is to say, earlier than the year 200 of the Vikrama era or an era nearly coincident with it. The figure from Sikri with which it has been compared must have been made considerably earlier. If this is so, Professor Senart's arguments in his discussion of

the age of the Gandhāra work in the *Journal Asiatique* are confirmed, while the dates assumed by Mr. Vincent A. Smith in his article in the *Journal of the Asiatic Society of Bengal* must be definitively given up.

Through the kindness of Mr. Percy Brown, curator of the Lahore Museum, I am able to send the three photographs that accompany this paper; (I) the new figure; (II) the inscription on a larger scale, from a plaster cast; (III) the figure found by Colonel Deane at Sikri.

LAHORE, February 12th, 1902.

[In a letter to Dr. Stratton dated the 20th March, 1902, i. e. after this MS. had been sent to America, Dr. Vogel describes more exactly the place where the above-mentioned figure was found as being Skāragh Dherī (or Derī), eight and one-third miles north from Cārsadda, which is the distance (but not the exact direction) mentioned by Cunningham, A.S.R. ii, p. 90, from Cārsadda ("Pushkalavatī Stūpa") to "a small Stūpa where Buddha had converted the mother of the demons." Dr. Vogel adds that the image shows some resemblance to the Lokapāla-statues, a fine specimen of which is in the Lahore Museum (Grünwedel² 127) and another "here (at Mardān) in the Mess." As to the date, Mr. Percy Brown, in a letter to Dr. Stratton dated 18th March (1902) says: "My impression is that that inscription is not contemporaneous with the figure; it has been added later. The slightly concave nature of the surface of that portion of the statue is in itself rather suspicious. This is always found in inscriptions that have been super-imposed; it is necessary, in order to get a suitable surface to work upon. But a still more convincing fact is the very evident sign of there having been originally folds of drapery where the writing is now incised. However, the date you have read, the first half of the second century after Christ, is about the date I should have reckoned the sculpture was carved, judging by the other specimens in the Museum; but of course that is only guess-work, whereas your date is conclusive. The inscription may have been added only a few years after the carving." These letters, together with the original MS. of the article, which had been left almost untouched by Dr. Stratton at the time of his death, were kindly forwarded by Mrs. Stratton to the editors of this *Journal* in December, 1902. The argument above would be affected by the modification of Guduphara's date suggested by Bhandarkar in the *Journ. Bomb. Branch R.A.S.*, 1900, p. 27 ("Gondophares began to reign in 155 A.D."); but this date is extremely doubtful.—ED.]



FIG. III., p. 6.

Epic Chronology.—By E. WASHBURN HOPKINS, Professor¹ in Yale University, New Haven, Conn.

THIS essay is the third installment¹ in the series announced in this Journal, vol. xxiii, p. 109. It was presented to the Society at its annual Easter meeting in 1902, but in the Journal of that year other publications took so much space that the editors thought it best to postpone this publication till the next year. In the interval I have received two works on the chronology of India touching directly on epic data. They are of very different character. The first is the *Chronology of Ancient India*, by Mr. Velandai Gopala Aiyer, B.A., in which are discussed the beginning of the Kali Yuga and the date of the Mahābhārata war. This is a very ingenious attempt to establish the date of the war as beginning Oct. 14, 1194 B.C., though "the epic was cast into its present form more than a thousand years after the date of the war" (p. 98). The date 1194 B.C. is reached by a series of eleven converging arguments, based on (1) the Vedānga Jyotiṣa, which points to the beginning of the Kali Yuga as approximately 1173 B.C.; (2) a statement of Garga, which points to the beginning of the Yuga as occurring a few years before 1165 B.C.; (3) classical historians, whose figures point to 1177-6 as the beginning of the Yuga; (4) The Malabar era, which indicates for the same event 1176 B.C.; (5) details of the epic which, if the Yuga began at the winter solstice preceding 1176 B.C., would indicate 1194 B.C. as the date of the war; (6) the Rājatarāṅgiṇī tradition, which indicates the dates of the war to be about 1190 B.C.; (7) a statement of Āryabhaṭa to the effect that the Rsis were in Maghā in Kali 1910, i. e. 1192 B.C.; (8) the average duration of Hindu reigns, which also would indicate about 1193 B.C. as being the date of the war; (9) Garga's stanza cited in the Br̥hat Saṁhitā, which leads (? cf. IA. viii, p.

¹ Compare also the syntactical paper evolved from the same series and published separately, AJP. vol. xxiv, p. 1 f.; and the note on the same subject at the end of this paper.

66)' to the same conclusion; (10) the first year of the Brhaspati cycle of sixty years, corresponding to the date as given by Garga, i. e. 1194-3 B.C.; (11) a stanza of the epic, fixing the day of the winter solstice occurring soon after the war, which, in connection with the elements of the Jyotiṣa, would indicate that the war took place in the latter part of 1194 B.C. The exact day is then deduced from other epic verses.

A glance at this array of arguments shows that they fall into two divisions, in one of which is sought the date of the Kali Yuga, and in the other the date of the epic as based on the date of the Yuga. Important as is the general contention, for the purpose of the present essay only the latter division comes into account, and in this division only the arguments numbered 5 and 11 above. These points will be briefly considered in their proper place in the course of this paper, but I have thus outlined Mr. Aiger's contention in advance, that their bearing might be understood. In regard to the whole theory I can see no objection to the conclusion that tradition points to the twelfth century as the date of the Bharata war; but it is possible that the details of the epic should be considered as based on tradition rather than as furnishing it, and that this tradition referred originally to a great Bharata war rather than to the special Pandu war with which the epic really has to do. That the heroes of the present epic lived in the twelfth century B.C. seems to be historically impossible, if for no other reason at least for this, that the Pandus as such are unknown till long afterwards.

Of a very different sort is the symbolic interpretation of epic epochs and eras deduced from a general theory of Hittite and Akkadian supremacy in pre-historic times by J. F. Hewitt in his *History and Chronology of the Myth-making Age*, which is the second work referred to above. A few examples will suffice to show the character of the "chronology" evolved out of a symbolic interpretation of the epic: A year of eleven months and another of seventeen months, divided into seven-day weeks, are discovered to be latent in the fact that the Kurus have eleven and the Pandus seven *akṣauhiniḥ* (armies), inter-

¹ Compare the argument as reported in the Secretary's correspondence in the Proceedings for April 1903, at the end of the second half of this volume of the Journal.

preted as "monthly revolutions of the axle." The eldest Kuru was Duryodhana, who brayed like an ass at his birth, thus showing him to be the son of the divine (epoch-making) three-legged ass. Duryodhana's car was drawn by mules, "thus showing him to belong to the race born from the union of the sun-horse and ass." The thirteen-month year was brought to India during the rule of Kansa. Kansa is the same as Hansa, the goose-god of the Ugro-Altaic Finns (Ugro is Sk. *ugra*); so Su-bhadra means the Su-bird, Su is Akkadian-Egyptian Khu (mother-bird). The epic shows all the changes from the pole-star epoch to the solar epoch of reckoning. The year of seventeen months ended and the eighteen-month year began at the epic sacrifice of the (sun-)horse, 10,200 B.C., and the eighteen books of the epic symbolize the eighteen-month year (of twenty-day months), which was the outcome of the Pandus' victory. This was the year which was taken from India to Mexico in the Bronze Age. The epic is an allegorical history of India from the Neolithic to the close of the Bronze Age and represents the period of the years of eleven, fifteen, thirteen, and seventeen months each. Pārthas (sons of Pṛthā) are Parthians. Despite the date of the horse-sacrifice at which he is present, Yudhishthira himself was born in May, 12,200 B.C. Here, as the learned author sorrowfully admits, "there is a difficulty" about the exact date! But that Karna is the "horned lunar-solar god of the three-year cycle," and that Gandhārī (from *gan*, 'land,' and *dhari*, 'wetter') is the goddess Dharti, the star Vega, in the constellation of the Vulture, now Lyra, which was the pole-star from 10,000 to 8,000 B.C., admits not even of an interrogation point.¹ The reader will readily see why a modest study like mine can dispense with any discussion of such conclusions as these, interesting as they are. I turn now to a study of epic chronology based not on fancy but on facts.

NEGATIVE TIME; INDEFINITE PERIODS.

God, as Great Time, Mahākāla, a late-epic epithet of Śiva, and as All-time, is also Not-time, *akālaś cā 'tikālaś ca duṣkālāḥ kāla eva ca*, xii. 285. 143 (after *akālāḥ kelikālāḥ kalīḥ*; cf.

¹ Hewitt, *op. cit.*, pp. 309 f., 327, 374, 426, 529, 561 f., 580, 587.

Mait. Up. vi. 15), or, otherwise, the destruction of time in the reabsorption of the universe, *pratyāhāra*; though elsewhere (*loc. cit.*, *Great Epic*, p. 182) Time is the destroying Lord. As with space, the word *antara*, interval, when in negative form, expresses negative time, "there was no interval," etc. The word itself is combined with "winking," in a colloquial form. Thus, *nimeṣāntaramātrena*, "in the measure of a wink's interval" (space of a wink), vii. 98. 37, etc. The wink is the twinkling of an eye (expressly), *akṣurnimeṣamātrena*, xii. 321. 11; *yāvad akṣinimeṣāpi*, xiii. 100. 41; *akṣor nimeṣamātrena*, vii. 51. 17; and, as with us, it may be cut in half, though the latter phrase is rare, *nimeṣārdhāt*, "in half a wink," viii. 25. 13; *madhyāhne vāi nimeṣārdham (tiṣṭhasi tvam divākara)*, "at noon (O sun, thou standest still) half a wink," xiii. 96. 6.¹ More common than "half a wink" is *muhūrtakam*, which in colloquial language as diminutive of *muhūrta* (*muhūḥ* = *mox*) has no reference to hour but means a little time, *tuṣṇīm āsīn muhūrtakam*, R. vii. 13. 15, Gorr., but not in Bomb. ed.; Mbh. i. 133. 2, *tiṣṭha tāvan muhūrtakam*, "stop just a moment."

In xiv. 48. 2 and 3, a moment is expressed first by a breathing, *ucchvāsamātram*, and then by a wink, *nimeṣamātram*, both being followed by *api*, as marking the shortest time (at death, *antakāle*); in v. 79. 20, by *lavaṣaḥ kṣaṇaśaś cā 'pi*.

The indefinite non-technical nature of these terms shows itself in the exchange of *nimeṣa* with *nimeṣamātrena*, for example in xii. 313. 6; and in the phrase *muhūrtam iva*, "momentarily," compared with *muhūrtam sahyatām*, "a short time," ib. 319. 9. The *muhūrta* in iii. 297. 7 appears with *velā*, period of time, as well as *kṣaṇa*, another indefinite word for moment. The eighth *muhūrta*, noon, *kuṭapa*, is called *abhijit* and is mentioned by this name in R. Gorr. vi. 112. 70; but the corresponding passage in Mbh., iii. 291. 66, has only the day and asterism.²

¹ Compare Vas. xi. 86 : *divasasyā 'ṣṭame bhāge mandībhavati bhāskarāḥ, sa kālāḥ kuṭapo nāma* (see the next note). So (epic) vii. 99. 1, where the sun "goes slow as it turns in its course (at midday) to the west."

² In xiii. 64. 27 *abhijita (yoga)* is mentioned as the twentieth lunar asterism; the same word occurring in i. 123. 6 in the other sense of *abhijit*, the eighth (noon) hour: *āindre candrasamāyukte muhūrte*

The flight of an arrow also measures a short indefinite period of time (as the stick-cast measures space). Thus in xii. 296. 32: *iṣuprapātāmātrāṇi hi sparśayoge ratih smṛtā*, "sensual pleasure is said to be (short-lived as) the measure of an arrow's flight"; ib. 321. 11, *lughvastragatigāminī*, "going the pace of a light arrow", i. e. in a moment; ib. 328. 30, *yathā bāṇaṇi guṇacyutam (āyāntam)*, (swift) "as a cord-spied arrow."

But as the indefinite sense of *nimeṣa* is lost in the formal time-table, so with other small divisions. In v. 109. 4, as typical divisions are named the *truṭi* and *lava*; the former being joined with *kalā*, portion, *kṣaṇa*, glance, and *nimeṣa*, wink, as "hairs of Time," in xii. 322. 25. Of these, *kṣaṇa*,¹ etymologically meaning a "look" or "glance," is, like *nimeṣa*, a moment, and so a moment of leisure (*kṣaṇin*, "at leisure," ii. 13. 45), whence comes a name for the giver of leisure, Night, *kṣaṇadā*, a late word, found in viii. 1. 8. Characteristic of the later didactic epic is the fact that it uses the ending *rātra* as an independent word, *trīṇy rātrāṇy upoṣitvā tena pāpād vimucyate*, in the jargon of this period, xiii. 136. 11.

Time-periods casually mentioned or enumerated in various passages of Śānti, xii. 137. 21; 227. 97 (repeating, as a section, 224) and also xii. 166. 14, do not present the ordered progression of the time-table, but juxtapose *kāṣṭhā*, *kalā*, *muhūrta*, *divā*, *rātri*, *lava* (before month, half month, season, aeon, year); or *ahorātra*, month, *kṣaṇa*, *kāṣṭhā*, *lava*, *kalā* (all acc., followed by *sampūlayati yathā kālo vṛddhiṃ vārddhasiko yathā*, "Time adds up days etc. as a usurer adds up his increase," 227. 97); or, in the order of creation, years, seasons, months, half months, *lavas* and *kṣaṇas*. In ii. 11. 37 (also late), *divā* is nom., as above.

The *lava* is a bit (*śaktiprasthalava*, xiv. 90. 115), or minute "cut" of time, corresponding loosely to our minute in ordinary speech. God is praised as all time in i. 25. 14,

'bhūjite 'ṣṭame, divā madhyagate sūrye tithāu pārṇe 'tīpūjite. Here *āindra* is the asterism *Jyeṣṭhā* and *madhyagate sūrye* is "at midday." Compare xii. 326. 28: *mādhyamgatam ivā 'dityam*, "like the midday sun" (metrically altered).

¹ So too the compound of this word, *abhikṣaṇam*, every moment, too much, i. 78. 9; 100. 60; xii. 86. 29 (*bhṛṣaṇ vā*). Compare *anvakṣam* in Yāj. iii. 21, for the adverbial use in *kṣaṇena*, "in a glance" (moment).

tvam muhūrtas tithis tvam ca tvam lavaṣ tvam pṛaṇḍ kṣaṇaḥ śuklas tvam bahulas tvam ca kalā kāṣṭhā trutis tathā,

where *bahula* is a poetical equivalent of the dark half of the month, and *trutis* is a fractional bit of time. The *muhūrta*, in ordinary language a moment, in the formal time-table of the epic is an hour of forty-eight minutes. "They say that in the evening, *pūrvarātra*, the twilight hour, *muhūrta*, except for eighty *lavas*, is devoted to demons, the remainder, *śeṣam anyat*,¹ to men," i. 170. 8-9. Another passage states that "after midnight" is the time when demons roam about: *rātrān niśīthe tv abhīle gate rāhasanmaye, nṛpa, pracāre puruṣādānām rakṣasām ghorakarmāṇām*, iii. 11. 4. The former passage is to be compared with i. 154. 22, which says that the whole twilight, *samādhyā*, is *rāudra muhūrta*. Besides the *rāudra*, after sunset, *muhūrte ramyaclāruṇe*, iii. 1. 45 (both "fair and horrible"), the noon hour, *abhijit (kutapa)*, above, and the *brāhma muhūrta*, the hour before sunrise, are mentioned, xiii. 104, 16 (= *apararātṛeṣu*, "at the end of the night," ii. 5. 29).

Little can be learned of the relative length of these periods as mentioned generally in the epic. They appear to be designations of short times as indefinite as twinkling and moment. Nor does the order in which they are mentioned in other places help in this matter, for sometimes one and sometimes another precedes. In xiii. 14. 185, the order is day, half day, *muhūrta*, *kṣaṇa*, *lava*; and ib. 395, *nakṣatrāṇi*, *grahāḥ*,² *nāsārddhamāsā ṛtavo rātriḥ saṁvatsarāḥ kṣaṇāḥ*, *muhūrtās ca nimeṣās ca tathāi 'va yugaparyayāḥ*. The "year, season, half month, day and night, *ahorātra*, *kalā*, *kāṣṭhā*, *mātrā*, *muhūrta*, *lava*, *kṣaṇa*," make the list of xiii. 159. 32, which brings in the *mātrā*, *mora*. This is found also in xiii. 17. 141 f., where the list is season, year, month, half month, *pakṣa* (Śiva as "number-effecting," *saṁkhyāsamāpanaḥ*, is explained by N. as effecting *saṁkrānti* and the new and full moon days), *kalā*, *kāṣṭhā*, *lava*, *mātrā*, *muhūrta*, day, night, *kṣaṇa*.

Besides being an astronomical period or course (of the sun), as in xii. 51. 15, the *kāṣṭhā* (copied from Kāṭha Upaniṣad, iii. 3,

¹ Compare (*tad*)*ahahśeṣam*, xiii. 19. 101; 20. 9.

² Compare xii. 285. 128, where also *meghakāla* is mentioned (*samvarta-kabalāhakah*) and the *yugāvarta*, 144-152 (see below).

sā kāṣṭhā sā parā gatīḥ) is found in a non-technical sense in xiii. 16. 57, *īyaṁ sā paramā kāṣṭhā īyaṁ sā paramā kalā . . . īyaṁ sā paramā gatīḥ*. The Upaniṣads otherwise, it may be remarked, have the list, day, night, month, year, *kalā muhūrtaḥ kāṣṭhāś ca*, but not till Mahānār. i. 8.

DEFINITE DIVISIONS.

Nevertheless, the pseudo-epic has its regulated time-table, xii. 232. 12 f. It is in a lone triṣṭubh stanza, which has been introduced into the poem at a period later than Manu, whose general scheme is followed, but with this important difference, that the epic agrees in detail with the later Puranic view rather than with Manu; excelling the latter also in exactitude.¹ It is as follows (sc. *gaṇayet*, "one may reckon"):

15	<i>nīmeṣas</i>	make one <i>kāṣṭhā</i>
30	<i>kāṣṭhās</i>	" " <i>kalā</i>
30 $\frac{1}{10}$	<i>kalās</i>	" " <i>muhūrta</i>
30	<i>muhūrtas</i>	" " day and night
30	days and nights	" " month
12	months	" " year (of two semesters, <i>ayane</i>).

Manu's account, i. 64, differs from this in ascribing to the *kāṣṭhā* eighteen *nīmeṣas*, instead of the epic and Puranic (VP. i. 3. 7) fifteen; nor does the law-book add to the thirty *kalās* that make a *muhūrta* the epic's one tenth: *triṁśatkalaś cā 'pi bhaven muhūrto bhūgaḥ kalāyā daśamaś ca yaḥ syāt*.

According to this table, the *nīmeṣa* is about one-fifth of a second; the *kāṣṭhā*, about three seconds; the *kalā*, about a minute and a half; and the *muhūrta*, just forty-eight minutes. On *kalā* as a fraction, see this Journal, xxiii, p. 135. For a Brāhmaṇa calculation of time-divisions, see ŚB. xii. 3. 2. 1-5.²

¹ But it differs from that later division (not recognized at all in the epic) by which the Hindu hours and minutes are exactly inverted as compared with ours, that is (instead of a day of twenty-four hours of sixty minutes each) a day of sixty hours, *nāḍis*, *ghaṭikās*, of twenty-four minutes each (*ahorātraḥ ṣaṣṭighaṭikābhil*, N. to ii. 11. 38).

² This Brāhmaṇa recognizes half-months of fifteen days, twelve and thirteen months; three, five, six, and seven seasons, i. 3. 5. 8 f.; ii. 2. 3. 26 f., etc. The table (referred to above) in the twelfth book (cf. x. 4. 3. 8) has the *muhūrta* as above, one thirtieth of a day; and the *nīmeṣa*; but this is cal-

But, before proceeding with the greater divisions of time added to the table, it will be necessary to take up in more detail the last three divisions of the scheme already given.

DAY AND NIGHT.

Tacitus says of the Germans' view, *nox ducere diem videtur*. The Polynesians and New Zealanders to-day always count by nights, and the Babylonians originally made the whole day begin with the evening. According to the Vedic views represented by the Brāhmaṇa period, ĀB. viii. 15. 2; ŚB. ii. 4. 2. 3; x. 6. 4. 1, and by MS. i. 15. 12, it is not quite certain that night was the norm of time. It is true that night generally precedes when days and nights are mentioned together,¹ but on the other hand, in contrast to space, *dyāvah*, time is reckoned as "days" in RV. iii. 32. 9, "nor days, nor months, nor years" (harvests). Yet since we find also "nights and years," iv. 16. 19, and this view prevails, it may, perhaps, be regarded as the more primitive Aryan norm of short times. It is the Avestan method of measuring, and Dr. Bolling has lately shown that in Homer also the day is reckoned from sunset to sunset.² How long such a method may continue under favoring circumstances was well known a few years ago to the boys of New England, whose weekly holiday ceased sharply as the Sabbath began, at sundown on Saturday!

In the great Hindu epic, an inheritance of stereotyped formulas somewhat affects precedence in the phraseology of the poets, who use *ahorātra*, *divārātra*, but also *rātryahanī*. Generally speaking, night is the favorite word in compounds such as *tri-rātra*, *saptarātra*, *daśārātra*; but the alternate forms are used as well, *ekāha*, *saptadina*, etc., and the same passage may give precedence to both words, as, for example, in xii. 124. 16, *ekarātreṇa*, *tryaheṇa*, *saptarātreṇa*, *pṛthivīm pratipedire*. "Several days" is *saptā 'py ahāni*, i. 92. 15, and *nīśāniśam* and

culated otherwise, as a subdivision of *kṣipras*, *etarhis*, *idānis*, and breathings (= *nimeṣas*), arranged in multiples of fifteen. Here the year has three, five, six, or seven (Vedic) seasons; twelve or thirteen months; three hundred and sixty days; ten thousand eight hundred *muhūrtas*; etc. On the sixty-hour division in the Rig Veda, see Zimmer, AIL., p. 363, and Ludwig's note to RV. 1. 123. 8.

¹ Cf. Zimmer, *op. cit.*, p. 360 f.

² AJP. xxiii, p. 428 f.

divāniśam are used indifferently. So in other phrases, *sūryā-guṇā rātrīdivendhanena*, "with the sun as fire, night and day as kindling-wood," xii. 322. 92; *rātrāv ahanī saṁdhyāsu*, "night, day, twilights," xiii. 115. 28; *prabhāte ca sāyam ca*, "morn and eve," iii. 305. 10; *sāyam prātaś ca*, "eve and morn," iii. 200. 83; xiii. 78. 9; *āhnikān cār 'va nāiśam ca duḥkham*, "daily and nightly sorrow," v. 110. 14; *avasāns tatra saptarātram, aṣṭame 'hanī saṁprāpte*, "they stayed there a sennight, on the arrival of the eighth day," iii. 158. 22 f.; *aṣṭā-lasāha, trayaviṁśatirātra, aṣṭaviṁśatirātra*, xv. 10. 30; xii. 46. 14; iv. 36. 3, respectively.

But it is formally stated in xiv. 44. 2, that, as the bright fortnight of the moon precedes the dark fortnight, so day precedes night:

*ahah pūrvān tato rātrir māsāḥ śuklādayaḥ smṛtāḥ
śravaṇādīni ṛkṣāṇi ṛtavaḥ śīśirādayaḥ,*

"the day comes first, then the night; the months begin with the bright fortnight; the asterisms begin with Śravaṇa; the seasons begin with (the cool time) Śīśira." Moreover, *śvaḥ*, to-morrow, always in practice refers to a day that begins in the morning, not at sunset, and "half the day" is measured from the sunrise. On the other hand, it is formally stated in xiv. 44. 18, that days end at sundown, *ahāny astamayāntāni*, and night ends at sunrise, *udayāntā ca śarvārī* (as "joy ends in sorrow and sorrow ends in joy"); but here the "day" is the bright part of the whole time. Light ends in darkness as darkness ends in light, is the whole meaning; probably without thought of defining the (following) day as beginning with evening.

Besides the restriction of the border-period, *velā*, of the twilights, *pūrvā* and *paścimā*,¹ day and night are divided into fore,

¹ But *velā* is a general hour; *sarvāsu velāsu*, "at all hours," iii. 305. 3 (*paścimā velā*, iii. 65. 5). 'At dawn' is *śarvāryām* (or another word for night) *prabhātāyām, vyūṣṭitāyām, vyātītāyām*; or *prabhāte, prage, vimale, uṣasi, uṣasya-* (*uṣasyoḍhā bhāratelyaś ca*, xiii. 76. 18). On *śvo-bhūte*, etc., see the last paper in this series, Journal, xxiii, p. 351. In the formal definition of the BS. xlvii. 21, the *saṁdhyā* is from half-sunset (when the sun is half under) till the stars become visible (not yet bright), and from their fading till half-sunrise: *ardhāstamayāt saṁdhyā, vyaktibhūtā na tārakā yāvat: tejahparihānimukhād, bhānor ardhodayam yāvat*. See below on the correlation of this division of the day with the corresponding century-*saṁdhyā* in the scheme of ages.

mid, and after parts, *pūrvāhṇa*, *madhyāhṇa* (*madhyāhṇina*), *aparāhṇa*; *pūrvarātra*, etc., the only measured period being the *samudhyās*, twilights (of one hour and twelve minutes, as reckoned later). Compare viii. 91. 51; xii. 207. 29; and xii. 224. 53 f.:

*ṛtūn māsārddhamāsānś ca divasānś cakṣaṇānś tathā
pūrvāhṇam aparāhṇam ca madhyāhṇam api cā 'pare
muhūrtam api cāi 'nā 'hur ekam santam anekadhā
tañ kalam iti jānāhi yasya sarvam idaṁ vaśe,*

where Time and Fate, *bhavitavyam*, set at naught the doctrine of sin working out in a new birth (ib. 32, parallels, *Great Epic*, p. 103). In iii. 65. 6; xii. 304. 3, etc., *ardharātra* is midnight (also *niśitha*) instead of *madhyarātra*, as used in the epic, xv. 5. 34, where, after *prātar*, *pradoṣa*, *aparātra* have been mentioned, the king is told to have his *vihāra* at midnight and midday, *madhyarātre*, *madhyāhṇe*. Manu, vii. 151 (in the same connection) uses *ardharātra*.¹ Evening has more names than any other division of the day, of which *sāyam*, *sāyāhṇa*, is most current, as in the phrase, common to both epics, *yatra sāyam-ṛgha*, one whose house is where evening finds him, i. 13. 12, etc.; R. ii. 67. 23. The beginning of evening (when fire-flies are out, vii. 15. 18) is currently *pradoṣa* (*niśāmukha*); "late in the afternoon" is *mahaty aparāhṇe*, i. 190. 47. Compare ĀB. ii. 15. 8; Manu iv. 129, *mahāniśi*, and xii. 322. 73: *śvaḥkāryam adya kurvita* ("do to-day to-morrow's duty") *pūrvāhṇe cā 'parāhṇikam* ("do in the morning the work of the afternoon"). Compare ŚB. ii. 1. 3. 9, "put not off till to-morrow; for who knows man's morrow?"

The three watches of the night are alluded to in a stanza which speaks of one night of three watches, *triyāmā rajanī*, as being so fearful as to seem like a thousand watches, *sahasrayāmapratimā*, vii. 184. 14. Vālmiki expresses the same idea, R. ii. 62. 17 (G. 63. 17), and his imitator, G. ii. 10. 17, *triyāmā rātriḥ . . . varṣaśatopamā* (omitted in the Bomb. ed. 13. 15); and it is found again in more modern form in the Mbh. viii. 1. 8,

¹ But a Yogin meditates in the fore-part, *pūrvarātre*, and sleeps in the middle of the night, *madhyarātre*, rising within an hour after this, xii. 326. 43. Compare xii. 229. 39.

*duḥkheṇa kṣaṇādā rājan jagāṃā 'balaśatopamā.*¹

The last watch of the night includes the *muhūrta* of Brahman (or Prājāpatya, as in Vas. xii. 47), alluded to above.

The formal rule for the king is that he shall sleep two watches and rise in the third *yāma*, ii. 5. 85.² In xii. 53. 1, "he woke half a watch before day" is expressed by

yāmamātrārddhaśeṣyām yāminyam pratyabudhyate,

where *yāma* gives the name to *yāminī*, night. A corresponding division of the day is apparently alluded to in xiv. 39. 18,

ahus tridhā tu vijñeyam tridhā rātrir viddhyate,

though years and conjunctions of seasons also, *varṣāṇi*, *saṃdhyāḥ*, are here made three-fold, by virtue of the all-pervading *gūṇas*. The natural three-fold division of the day, morn, or sunrise, *sūryadarśana*, noon, *kuṭapa*, and evening, of many names, is implied in the conventional use of a ritualistic formula; so that we find not only *triveṇam*, "thrice daily," but also *saptatṛiṣavayam snātrā*, xiii. 136. 18, "bathing three times a day for a week." Sunrise gives a number of expressions indicating that the time for man to be up is already passed when the sun is up: *utsūryaśāyin*, *abhyudītaśāyin* (like *prageṣaya*, *prageniṣa*), used of lazy people, opposed to early risers, *kalyan utthāya*, *kalyotthāna*, *prātar utthāya*, etc., as in xiii. 130. 9; 146. 48; xv. 11. 11. The word sun is not necessary. Thus, "at or before sunrise" is simply *udaye* or *ulite* 'rudite vā'pi, xii. 60. 49. An hour after sunrise is *muhūrtodīta āditye*, i. 126. 12. There is probably no sharp distinction between the periods loosely indicated by "brightness." Thus *prabhāte* is usually the first dawn (as in *nīśi prabhātāyām*, "when night grows light"), but in i. 21. 1 we find *tato rajanyām ryuṣṭāyām prabhāte* 'bhyaulite ravām "when day had dawned,

¹ Cf. iii. 164. 13 (grief made every night and day seem like a year). Conversely, in iii. 176. 5, four years of joy pass "like one night."

² I have noticed in the epic no "fourth watch," such as is found in the classical period, e. g. in the BS. xxx. 3 f., and Harṣacarita, to mark the time before dawn. Thus in Harṣacar. 166, the fourth watch, before dawn: and in 228, at the end of the third watch, eight strokes mark the number of leagues in the day's march. The modern Hindus divide the day also into watches, *pahars*, of three hours each.

and morning had come, and the sun had risen.”¹ The sun “sets” is usually expressed by “goes home,” *astam upāiti savitā* (at sunset, *astam gacchati bhāskare*; just after sunset, *sūrye ‘stam ite sati*, “being gone,” ix. 29. 64 and 87; the sun sets twice on this day!), but this is sometimes filled out with the word bill, *sūryo hy astam abhyagamād girim*, i. 24. 10. *

Of short combination of days, *saptarātra*, sennight, is colloquial, interchanging with *saptāṣṭa divasāḥ*, seven or eight days, the former perhaps more common: *saptarātreṇa mṛtyu-bhāk*, “he will die within a week,” xii. 318. 13 (amongst the *aristāni*, “death-signs”), etc. But ten days also make a group and three and its multiples are more common in the ritual, *tri-rātra*, *tryaha*, *ṣaṇvrātra*, *dvādaśarātra*, periods of three, six, and twelve days. The fortnight, *ardhamāsa*, *māsārdha*, *pakṣa*, is not regarded as a group of days but as half a moon, or the one wing, division, of a month, *pūrva* and *apara*, xiii. 87. 19 = Manu iii. 278.

In accordance with a “Veda-word” (cf. ŚB. xii. 2. 2. 23) there is a formal equation of the year with a day and night in iii. 52. 23:

ahorātram mahārāja tulyam saṁvatsareṇa ha,

which may be compared with the ritualistic substitution of a month for a year, ib. 35. 33.²

MONTHS AND SEASONS.

The Months: Although the month of thirty days is Vedic, yet, to judge by colloquial epic language, the month was a moon’s length, twenty-seven to twenty-eight days. This is implied in the colloquial expressions just referred to, which, like our week of seven to eight days, give natural halves of a half-moon period.

¹ So in Sūtras, when “the sun is over the trees,” *adhivṛkṣasūryam adhvānam na pratipadyate*, is either noon or late afternoon, Vas. xii. 48; Gāut. v. 40.

² Compare the phrases, *sūryāstamanavelā* (*astamana*=*astamayana*); *astam yāte* (or *prāpte*) *divākare* (or *dinākare*). Before the evening twilight comes on is expressed by *anāgatāyam saṁdhyāyām paścimāyām*. The noon of the sun is expressed by *madhyadeśagate ravāu* (after *prāpte cā ’hnikakāle tu*), xii. 346. 14 (in 18 *pitarah* is accusative); also by the sun’s turning *astāśikharam prati*, vii. 99. 1.

³ Compare Mahānār. Up. xxv. 1, *ye ahorātre te darśapūrṇamāsau*.

But the regular ascription of "ten months" to the period of pregnancy (c. 280 days) sets the matter beyond doubt, as otherwise we should have an extraordinary duration (300 days) assumed as the normal period. Apart from cases of diabolic birth, pregnancy of three years, i. 74, or longer, and divine or devilish performances of a similar sort, as when "demons conceive and instantly give birth," birth is usually said to follow in ten months (cf. Ch. Up. v. 9. 1), *garbhān daśa māsān bibh-rati*, iii. 134, 17; xii. 7. 14; iii. 128. 7; 132. 14; 205. 10; xii. 332. 18, etc. So RV. x. 184. 3; ĀB. vii. 13. 9, *daśame māsi*, in the course of the tenth month.¹ But as the solar month becomes popular we find in the Sulabhā-Janaka episode, inserted in xii. 321, that the period of pregnancy is set at the end of the ninth month, *sampūrṇe navame māsi jātaḥ*, śl. 117. So in the introduction to the poem, i. 63. 61, Vyāsa's mother is ready to be born after nine months, as soon as the tenth month arrives, *māsi daśame prāpte*; and in the law-book of Yājñavalkya, iii. 83, birth is said to take place "in the ninth or tenth month." Also in iv. 36. 3, "twenty-eight nights or a month to its end" (was the fight) seems to imply a month of thirty days; while in xii. 232. 13 a "month" is formally declared to be of this length, *māsah smṛto rātryahanī ca trīṇśat*. To distinguish the two kinds of months we find Māgha described as *sāumya*, lunar, in xiii. 168. 28. Compare, however, the sense of agreeable or moonlighted in v. 142. 16-17: *sāumyo* (N. *candrikayā abhīrā-mah*; this is said a week before the new moon) '*yaṁ vartate māsaḥ supṛāpayavasandhanaḥ . . alpamukṣikaḥ, nispaṅkaḥ, nā'tyusṇasīśiraḥ*. As the solar month, really civil month, of thirty days was thus reckoned from remotest antiquity, it is a question of locality or popularity only. In many cases a "month," according to long-inherited use and metaphors (below) was thirty days; in other cases, however, it was a moon, not quite twenty-eight days, though reckoned as full twenty-eight.

¹ So a devil's baby becomes full-grown at once: *sadyo hi garbhān rākṣasyo lubhante prasavanti ca (bālo 'pi yāuwanam prāptaḥ)*, i. 155. 35 f.

² Cf. *daśamāsyā, daśa māsān*, RV. v. 78. 9; ŚB. iv. 5. 2. 4. But ŚB. xi. 1. 6. 2, *sāmvatsara eva strī vā gaur vā vaḍavā vā vijāyate* ("in the course of a year," as in ŚB. iii. 2. 1. 27, *sāmvatsare jāyamānaḥ*), gives only the outer limit, this side of which birth takes place, "in (-side of) a year." Cf. ib. xi. 5. 4. 6.

A stanza cited above, p. 15, shows that the month does not begin with the full-moon, as was sometimes the case,¹ but with the bright fortnight, *māsāḥ śuklādayaḥ*. The moon, it is said, is born at the beginning of the bright fortnight (by means of drinking the "six essences" of Varuṇa), *jāyate taruṇaḥ somaḥ śuklasya 'dāu tamisrahā*, v. 110. 4. The bright half ends with the full moon, *śuklātīyaye pāurnamāsyām*, i. 76. 61. The full-moon day is par excellence the month-day, e. g. *kārtikī* is the full-moon (night) of Kārtika. "Fair as the full-moon," *pāurnamāsyām iva 'nduh*, i. 76. 61; etc., is an epic commonplace;² "ugly as the moon on the fourteenth day of the dark fortnight," *draṣṭum na naḥ prītikaraḥ śaśi 'va kṣṇasya pakṣasya caturdaśāhe*, xi. 21. 13, refers to a gnawed body, diminished and ghastly.

Only traces remain of Vedic phraseology in naming the seasons (months): *supraspitavane kāle kadācin madhumādhave* (= Cāitra-Vāisākha) spring-time, i. 125. 2; *śuciśukrāgame*, the time of heat,³ *śuciśukrāgame kāle śuśyet toyam ivā 'lpakam*, ii. 47. 24; "the sun absorbs water with his fierce heat when intervening between Śuci and Śukra," *ugraraśmīḥ śuciśukramadhyagaḥ*, viii. 79. 78. But this is also the tempest-time (when the monsoon first blows), *janāghāvāto ravāu cā 'sya śuciśukrāgame yathā*, i. 151. 2 (*jyesthāśāṅghayoh samaye*, N.). The following rain-months, Nabhas and Nabhasya,⁴ are alluded to in H. ii. 95. 1; but there is no mention of the corresponding Vedic terms for autumn, Ūrja and Iṣa; of those for winter, Saha and Sahasya; or of those for cool-time, śāśirāu, called Tapa(s), *Tapasya (yad etayor balistham śyāyati)* in ŚB. iv. 3. 1. 19; viii. 7. 1. 5.

It is usually in conventional passages that the "four-month" season is noticed: *darśe ca pāurnamāse ca cāurmāsyē punaḥ*

¹ ŚB. vi. 2. 2. 18 and Kāuś.B.v.1, etc., give the full moon of Phālguna as the beginning of the spring and of the year (*pāurnamāsi ha vāra prathamā vyuvāsa*).

² Compare Yāj. i. 80, *sustha indāu*, "when the moon is full" (?), one should "avoid Maghā and Mūla in connubial intercourse."

³ Cf. ŚB. iv. 3. 1. 14, Madhu and Mādhava are the *vāsantikāu* months of growth; ib. 15, Śukra and Śuci are the *grāismāu* months of strongest heat.

⁴ ŚB. loc. cit. 16, *vārṣikāu*.

punar, (offered horse-sacrifices) "on the new and full-moon and on the thirds of the year," xii. 29. 114. But it is once given as the proper term for wages which are to be paid *cāturmāsya-rām*, "at least every four months," ii. 5. 118. The seasons thus divided are summer, rains, and winter, or spring, rains, autumn, according to ŚB. xii. 8. 2. 33; vii. 2. 4. 26, respectively (which must embrace the remaining time). The full-moon of Phālguna is the regular beginning of the *Cāturmāsya*. See also below.

According to xiii. 168. 6 and 28, the winter solstice occurs near the beginning of the bright half of the month of Māgha. The saint who dies here is anxious to pass away at an auspicious period, i. e. in the northern course of the sun and the bright half of the month. He asserts in this passage that the proper conditions are fulfilled. The solstice has already taken place (xii. 47. 3) and he says: "The lunar month Māgha has arrived, Yudhisthira, and the bright fortnight must be two-thirds (or a quarter) past."

*māgho 'yam samantapṛāpto māsaḥ sāmanyo Yudhisthira
tribhāgaśeṣaḥ pakṣo 'yam śuklo bhavitum arhati.*

The doubtful meaning of *tribhāga* ($\frac{1}{3}$ as well as $\frac{3}{4}$) renders exactness of translation impossible. The natural agreement of the adjective would lead to the meaning given by Mr. Aiyer, that the solstice occurred "on the expiry of the fourth part of the bright fortnight in the month of Māgha, that is, on the fourth or the fifth day after new-moon" (*op. cit.*, p. 81). But there is no certainty that *tribhāgaśeṣaḥ* does not refer to the word month.¹ Nilakaṇṭha here says the day is the eighth of the month. Mr. Aiyer takes the fifth lunar day after new moon as the real meaning (referring to N. on vi. 17. 2). Then, according to the Vedāṅga, he argues that this would imply that the solstice was the fourth of the five winter-solstices of a five-year cycle (*op. cit.*, p. 84), and uniting this with the assumed date of the Kali Yuga in 1177 B.C., he arrives at 1194-3 as the date of the war according to the epic itself. It is at least unfortunate that a stanza so important for this result should not be less ambiguous, for if *tribhāgaśeṣaḥ* refers to *māsaḥ* the whole argument is invalidated.

¹ Mr. Aiyer's metrical objection (*loc. cit.*) is inconclusive, as he has admitted by letter.

Though Māgha is the solstice-month, neither this nor Cāitra nor Kārtika is the first month, but Mārgaśīrṣa. This, as is implied in the Gītā, stands in the same relation to the months as spring stands to the seasons.¹ In connection with the phrase *āgrahāyana*, this, like the epic list, points to Mārgaśīrṣa not as the best but as the formal first month (compare *āgrahāyanī* = *mārgaśīrṣī*, Vas. xi. 43). The list is given in xiii. 106. 17 f. and is as follows (with the alternate names supplied from another list at xiii. 109. 3 f.).²

Mārgaśīrṣa (November–December), Pāuṣa, Māgha, Bhagadāivata or Phālguna, Cāitra, Vāisākha, Jyēṣṭhāmūla or Jyāiṣṭha (*jyēṣṭha*, sic), Āśāḍha, Śrāvaṇa, Proṣṭha- or Bhādra-pada, Āsvayuja or Āśvina, Kārtika.

If, as the epic says, the month begins with the new moon, Māgha would be from the new moon of December to the new moon of January. But this list probably implies that (as usual) Māgha is counted from the full moon in January and so on, Mārgaśīrṣa being from the full moon of November. Two passages in Virāṭa show that when the “seventh day” and “eighth day” are mentioned they refer to the days after the full moon. In iv. 47. 10–11, these days are cited merely as *saptamyām aparāhne* and *aṣṭamyām ādityasyo 'dayam prati*, “on the afternoon of the seventh and at sunrise on the eighth,” which days in 30. 26–27 are referred to as *kṛṣṇapakṣasya saptamīm* and *apare divase*, “on the seventh of the dark half and on the next day.” This is borne out by the fact that the pseudo-epic (like the law) gives as marching-months Mārgaśīrṣa, Phālguna, or Cāitra, which would be November, February, March (cf. Manu vii. 182, Vishnu, iii. 40), or more particularly the full moon of these months, Cāitrī, Mārgaśīrṣī; and in fact Kārtika, Kāumuda, overlaps autumn and winter, v. 83. 7:

Kāumude māsi Revatyūni śaradante himāgame,

“on the arrival of cold, at the end of autumn, under the star Revatī, in the lotus-month;” xiii. 115. 76:

¹ Kṛṣṇa says (10. 35): *māsānām mārgaśīrṣo 'ham ṛtūnām kusumā-karah*. On this passage and the application of *āgrahāyana*, compare Tilak, *The Orion*, pp. 67 f. (Phālgunī, the first night of the year), 86 f., 153; Jacobi, *Beiträge zur Kenntniss der vedischen Chronologie*, p. 109.

² The object of this list is to show that Kṛṣṇa ought to be adored under a different name on the twelfth of each month.

purā māṅsaṁ na bhakṣitam śāradaṁ kāumudam māsam,

“meat was not eaten of old during the autumnal month Kāumuda.”¹

There is, then, a certain discrepancy in the matter of the epic months. The data as to marching, etc., above, would indicate that they were the months of the law-books, as follows, reckoning from full moon to full moon: Mārgaśīrṣa, November–December; Pāuṣa, December–January; Māgha, January–February; Phālguna, February–March; Cāitra, March–April; Vāiśākha, April–May; Jyāiṣṭha, May–June; Āṣāḍha, June–July; Śrāvaṇa, July–August; Bhādrapada, August–September; Āśvina, September–October; Kārtika, October–November. But this is incompatible with Māgha being well on its way by December 21st, as above.

The lunar day, *tithi*, masculine and feminine, gives rise to auspicious and inauspicious days, *satithi*, *dustithi* (but *sudina* and *durdina* refer to the weather, e. g. i. 190. 46, *durdine meghasamphute*, “on a dull cloudy day”). The form is usually feminine, but *tithāu pārṇe*, i. 123. 6. The asterism and *muhūrta* are usually mentioned with the lucky or unlucky day, as in ii. 25. 4; *tithāu atha muhūrte ca nakṣatre cā ’bhīpūjite*; xii. 100. 25, *tithānakṣatrapūjitaḥ*; xii. 180. 45, 46, *uta jātāḥ sunakṣatre satithāu sumuhūrtajāḥ, nakṣatreṣu āsareṣu anye dustithāu dūrmuhūrtajāḥ*. Manu’s derivation of *atithi* from *anītyam sthitaḥ* is found, with a varied reading, in xiii. 97. 19 = M. iii. 102.

The holiest night is that of the full-moon of Kārtika, *puṇyātamā rātriḥ parrasaṁdhāu sma śāradaḥ kārtiki*, iii. 182. 16. The thirteenth day is a very lucky day, *praśastā*, iii. 134. 20, but not when sun and moon are eclipsed, vi. 3. 28, 32. The last stanza refers to the ill-luck of having a new moon on the thirteenth lunation, instead of the fourteenth, fifteenth or six-

¹ In i. 209. 30, *kāumudī* is either the moon or the full-moon night of this month:

akālakāumudīṁ cāi ’va cakratuḥ sārvalālīkīm,

“they made the moon untimely (rise) at all times” (or the night come, v. l. *sarvakāminīm*). According to the Sūsruta, Mārgaśīrṣa is the second autumnal month.

teenth, and the ill-omen of the new moon on the thirteenth with a synchronous eclipse. But every unusual number anyway is ominous of evil. Thus headless trunks are especially portentous when they have many hands and feet, ix. 58. 56, and animals with four eyes and five feet, and women having four or five daughters at a birth are grouped together, as of very evil omen, vi. 3. 3 f. So the unusual day is the unlucky day apart from the eclipse:

*caturdaśim pañcadaśim bhūtapūrvān ca ṣoḍaśim
imān tu nā 'bhijāne 'ham amāvāsyām trayodaśim
candraśūryāv ubhāv grastāv ekamāśim trayodaśim.*

It is added that an *aparvapi* eclipse portends disaster. With this stanza, vi. 3. 32, compare xvi. 2. 18, 19:

*evam paśyan Hṛṣīkeśaḥ samprāptam kālapyayam
trayodaśyām amāvāsyām tām dṛṣtvā prābravīd idam
caturdaśi pañcadaśi kṛte 'yam Rāhuṇā punaḥ
prāpte vāi Bhūrate yuddhe prāptā cā 'dya kṣayāya naḥ.*

The "first day" of the month is generally given by the moon-day, but sometimes by the number, *Kārtikasya tu māsa-sya prathamē 'hami*, ii. 23. 29. The days of the new and full moon, *amāvāsyā*,¹ *amāvāsī*, and *pūrṇamāsī*, are also called *darśa* and *pūrṇamāsa*. The most prominent and auspicious days are those of the new and full moon, the thirteenth, and the eighth (end of a week), *Sinivālī*, *Anumatī*, *Kūhū* and *Rākā*, the first part of the day of the new moon and of the full moon, and the latter part of the day of the new moon and of the full moon, respectively (ĀB. vii. 11), viii. 34. 32, etc. The eighty-seventh section of *Anuśāsana* gives the rules for *Śrāddhas* (compare Mann iii. 273-276) on each day of both fortnights, the fourteenth of each being bad. To live one hundred years, one must be chaste on the days of the new and full moon, and on the eighth and fourteenth of all lunar fortnights: *amāvāsyām*

¹ This has the epithet *Śakradevatā*, *saptamāc cā 'pi divasād amāvāsyā bhaviṣyati saṃgrāmo yujyatām tasyām tām āluḥ Śakradevatām*, "by the end of the week there will be a new moon; let the fight begin on that (new moon, for) they say that has Indra as its divinity," v. 142. 18. Aiyer, *op. cit.* p. 96, interprets as *Jyesthā* (as if *yām* stood for *tām*). Cf. *āindrā* (p. 32) and *śakra-dāivata*, BS. vii. 12.

pāurnamāsyām caturdaśyām . . aṣṭamyaām sarvapaksāpām, xiii. 104. 29; Manu iv. 128. A particularly favorable eighth day is known as *kāmyāṣṭamī*, for gifts and oblations, xiii. 71. 49; 76. 19; 132. 7, the last referring to that of the dark half of Kārtika:

*Kārtike māsi cā 'śleṣā bahulaśyā 'ṣṭamī śivā
tena nakṣatrayogena yo dadāti guḍāudanam, etc.*

Special gods have special days. Kṛṣṇa's day is the twelfth (above). Skanda's days are the bright half's fifth and sixth, iii. 228. 15; 229. 52 (*śrījugaḥ pañcamīm Skandus tasmāc chrīpañcamī smṛtā . . saṣṭhī mahātithih*). The Sun's day is the sixth or the seventh, *saptamyaām atha vā saṣṭhyām bhuktyā pājām karoti yaḥ*, iii. 3. 64 (perhaps on account of the title *Saptasapti*, for *saptāśva*, ib. 63).

The name of the month is added in noun-form, *dvādaśyām māghamāse* or *jyāiṣṭhe māsi*, etc., xiii. 109, passim, or the adjective form of the month is joined to the name of the day, *cāitryā pāurnamāsi*, for initiating the king at the beginning of the horse-sacrifice; *māghā pāurnamāsi* after *dvādaśī māghamāsikī*, xiv. 72. 4; 85. 4-8; or the day is implied, *parām cāitrīm upasthitām*, ib. 76. 25 (*pari cāitrīm*, 81. 23).

The Seasons: These are six in number, e. g. iii. 134. 13. The group consists of Śisīra, cool-time, Vasanta (*kusumākara*), Easter-time, Grīṣma, heat-time, Varṣās, rains, Śarad, autumn, Hemanta, snow-time. For Grīṣma is found also Uṣṇāṇi, heats, as in i. 222. 14, *uṣṇāṇi vartante*, "the heated term is at hand."¹ A favorite epic word for the hot spell is Nidāgha (Nidāghakāla, v. 26. 10) scorching-time:

meghāv eva 'tupāpāye dhārābhīḥ, vii. 98. 14,
with *uṣṇaparyāye meghānām eva vāgaurāḥ*, ib. 32.

nīdāghavarṣikāu māsau lokam gharmāśubhir yathā
(sc. *ahatām Pāṇḍavam*), vii. 30. 10 (v. l. C. 1331, *gharmāmbubhir*). So iii. 3. 49; vii. 146. 11; R. Gorr. v. 41. 25; and

¹ In xiv. 43. 8, *arke 'dhīpatir uṣṇānām jyotiṣām indur ucyate*, "the sun is lord of hot (things); the moon, of stars," the heated term may be specially meant. In the next chapter the sun is called the beginning of light, *ādityo jyotiṣām ādir agnir bhūtādīr ucyate*, 44. 5.

nāidāgha ṛtuḥ, AV. ix. 5. 31, etc., all showing that Nidāgha is the heated term before the rains begin. The first rains are called Prāvṛṣ, whence the phrase of both epics, *yathā prāvṛṣi toyadāḥ*, vi. 81. 39; R. iii. 18. 23, etc., though there is no passage, I think, indicating that the whole rainy period was formally divided into two seasons, *varṣās*, *śarad*, *hemanta*, *vasanta*, *grīṣma*, *prāvṛṣ*, which division occurs first (as just cited) in the Suśruta (Thibaut, *Grundriss*, Astronomie, p. 11).

In the six-season division, the rains take four months and the remaining seasons, of which the first is Śīsira, must be divided between eight months. Compare *caturō varṣikān māsān*, i. 62. 32, "through four rainy months;" and v. 35. 67:

aṣṭamāsena tat kuryād yena varṣāḥ sukhaṁ vaset,

where the eight months as a group are opposed to "rains," as also in Manu, ix. 304 f.

Though the earlier literature makes Vasanta the first season, that of the epic may begin with its expressed choice, and the seasons may be arranged about as follows: Śīsira, February; Vasanta, March–April;¹ Grīṣma, May till it rains; Varṣās, June–September; Śarad, October till cold weather; Hemanta, c. November–January. Hemanta is the season when the shadow is shortest, *muhūrtam sukham evāi 'tat tālacchāye 'va hāi-manā*, ii. 80. 50 (and elsewhere).² On the other hand, the Aśoka blooms at the end of Hemanta, *hemantānte 'śoka iva raktastabakamaṇḍitaḥ (babhāu Rāmaḥ)*, v. 179. 31. The term, probably, is a general one, either ignoring or, according to locality, merging into Śīsira.³ In the same way, Vasanta is an indefinite period, from the middle of February running through March and into April; as Grīṣma includes part of June. The rains may last four months, but there often are seasons when the rains are not more than two or three months, from the middle of June to the middle of August or September, instead

¹ The spring-festival comes on the thirteenth of the first half of Cāitra.

² Compare (at vi. 17. 2) the stanza of the Bhārata-sāvitṛī: *hemante prathame māsi śuklapakṣe trayodaśim pravṛttam Bhārataṁ yuddham nakṣatre Yamadātvate* (under Bharatī).

³ So in Manu, iii. 281, "thrice in a year . . . in Hemanta, Grīṣma, Varṣās," as the three general seasons, though six are known, ib. 217; also iv. 26 *ṛtvante* is at the end of the four-month season.

of the "four rainy months," and then Śarad begins earlier. The coming of the rains varies by almost a month, so there is quite a margin here as well as in respect to the other seasons, which are really meteorological divisions shifting from year to year like our dog-days and Indian summer. They are always numbered as six, *ṛtaravāḥ ṣaṭ*, v. 11. 15; viii. 34. 47, etc.,¹ but they are not enumerated as a group. According to iii. 3. 6, when the sun first took pity on starving man it began its work in the "northern course," and then passed into the "southern course," or in other words the year of the sun begins at the winter solstice, which in the epic is the time when begins the "northern course of six months," *ṣaṁmāsā uttarāyaṇam*, Gītā, 8. 24, to reach which Bhīṣma delayed his end, as explained above. The Gītā passage alone, however, may imply, as Mr. Tilak has suggested, through its collocation of fire, flame, day, bright half, and northern course, as opposed to smoke, night, dark half, and southern course, that the northern course was the fiery, flaming months, or in other words, that the year began not with the solstice but with the vernal equinox. This may well be the case, since the Gītā stanza is merely a recasting of a famous Vedic passage (Ch.U. iv. 15. 5, etc.).² The other Gītā passage, cited above, agrees with the older Brāhmaṇas in making spring the first season, whereas the pseudo-epic stanza cited above, p. 15, makes Śisīra the first season; a discrepancy consonant with the character of the heterogeneous epic.

A passage in Vana, 163. 34 f., says that the sun, after turning on his course, when desirous of making coolness, *śīśirāṇi*, favors the southern district. Then the cool-time arrives, *śaiśirah kālāḥ* (when cattle suffer, vi. 118. 8). Then returning, *nivṛttaḥ*, he takes to himself the energy of all creatures, which

¹ Three, five, six, or seven in early texts, e. g. ŚB. ii. 1. 1. 12-13, and above, p. 13, note 2.

² Compare Tilak, *The Orion*, p. 23 f. The northern course of the sun is the gods' abode, the Manes as opposed to the gods are as dark to light, ŚB. ii. 1. 3. 1 f. Here the gods are represented by the northern course, the bright half of the year (spring, summer, rains), the crescent (first half of) the moon, the day, and the forenoon, as opposed to the Manes, represented by autumn, winter, cool-time, etc., the gibbous moon, the night and the afternoon. It is added that spring is the priesthood, as the first (best) season and caste.

thereupon become sweaty, weary, and sleepy. Then, following a path incapable of being indicated, *anirdeśyam mārgam āertya*, the sun emits rain. Here the "cool-time" marks the beginning of winter, as the time of fatigue indicates summer. Instead of *bhujate* one might expect *tyajate*, as *tataḥ* following seems to show that the immediate result is coolness. But the words may mean only that after the southern course has been completed the cool time comes; though the southern course appears to precede the cool time immediately, which would require the latter to begin with the early autumn instead of the solstice, and the former to begin with the equinox:

*tathā tamisrahā devo mayākhāir bhāvayan jagat
mārgam etad asambādham ādityaḥ parivartate
sisṛkṣuḥ śiśīrāṇy eva dakṣiṇām bhujate diśam
tataḥ sarvāṇi bhūtāni kālo 'bhyarchati śāśīrah.*

The rainy season is described in iii. 182; it ends some time before the full moon of Kārtika (16). There is, I believe, no passage in the epic grouping the months, beginning with Māgha, in pairs according to the seasons, as they are both defined by native lexicographers and grouped in ĀB. iv. 26 (beginning with *nāsantikāu māsāu*); ŚB. iv. 3. 1. 14 f.; or as ib. viii. 3. 2. 5, *dvāu hi māsāv ṛtuḥ*, limits the season. At present the natives reckon three seasons of four months each, "hot, cold, and stormy," JASB., 1901, p. 57 of Part III.

THE ASTERISMS.

Though the "star-man," *nākṣatra*, xii. 76. 6, perhaps a mere fortune-teller,¹ is a despicable kind of priest, the stars are the object of constant study and even the asterisms are frequently brought into the epic narrative, sometimes formally, as in the lists spoken of below, sometimes incidentally, as when a "Tirtha of the Pleiades and Maghā" is mentioned, or when "Rohiṇī surrounded with stars," *tārābhīḥ*, serves the poet as a simile for a

¹ I am not quite sure of this, for the astrologer is also called a *sāmhvat-sara* and he is no better than a Śūdra, xiii. 135. 11, and yet this is the very title given to Garga, xii. 59. 111 (other references in my *Great Epic*, p. 15). The asterisms, though admitted into the ritual, are clearly little regarded in ŚB. ii. 1. 2. 19. Here, by the way, ib. 2, no asterisms have more than four stars except the Pleiades.

queen at court, ii. 58. 27. The latter star, Aldebaran, is the best-beloved wife of the Moon-god, and stirs up jealousy among the other asterisms, ix. 35. 47 f. Another story, reported below, attributes jealousy to Abhijit, "younger sister" of Rohiṇī, and tells how the six Pleiades, with the Fire-god as the seventh, replace her, iii. 134. 13; ix. 44. 12, as six; "seven-headed with Agni as divinity," iii. 230. 11. The Pleiades are the asterism of the Sword as Justice, xii. 166. 82. But apart from the Pleiades and Aldebaran, there is little notice taken of the asterisms, except when the planets and asterisms give portents, till we come to the formal lists of the latter in the late epic tables. Apart from the asterisms and planets, however, the Seers, the Great Bear and Dhruva, the Pole star, are not infrequently lauded and described. A saint-star is located "midway between the Holy Seers (the Great Bear) and Dhruva, the son of Uttānapāda" (Puranic), xiii. 3. 15. These Seers rise and set in the royal North (*diśām uttari rājā*, xiv. 43. 10) at Mount Meru, Mahā Meru, iii. 163. 15, round which go daily the sun and moon and other lights of heaven. Setting there, *astam prāpya*, the sun goes north, after the twilight time, *saṁdhyām atikramya . . . uttaram bhajate kṣaṭhām diśam* (as phrased elsewhere, xiii. 168. 6, *ḍṛṣṭvā [Bhīṣmaḥ] nivṛttam ādityam pravṛttam co 'ttarāyaṇam*); then eastward turning he goes on again. And even so, dividing the months, *māsān vibhajan kāle bahudhā parvasaṁdhiṣu*, goes the moon with the asterisms, *nakṣatrāṇi saha gacchati*, and having gone about Meru goes again to Mount Mandara, ib. 27 f. Compare v. 111. 14, "Here (in the North) are the Seven Seers, Arundhati, and Svāti, which rises here, and (the year) Pitāmaha" (as sacrifice).¹

Since the asterisms are known by name even in the Rig Veda, i. 24. 9, Śatam-bhīṣajah; x. (19. 1 ?) 85. 13, Maghā(?) and Arjunī; while the Atharva Veda, xix. 7, and other Vedic works presumably earlier, give lists of them, it may be assumed that, whatever the date of the epic, the poets were familiar with all the asterisms, and it is to be expected that the later epic will maintain its usual character by endorsing both lists, that of the twenty-seven

¹ *atra te ṛṣayah sapta devī cā 'rundhatī tathā, atra tiṣṭhati vāi svātī atrā 'syā udayah smṛtaḥ, atra yajñān samāsādyā dhruvaṁ sthātā pitāmahaḥ*, i. e. the year.

asterisms and that of the twenty-eight. Whether the asterisms were first counted as twenty-seven or as twenty-eight may still be doubtful (twenty-eight is more likely);¹ but the constant later view was that they were twenty-seven, and this is the current epic view, as represented in the usual ascription of twenty-seven wives to Soma. They are *nakṣatrayoginyāḥ*, *nakṣatrayoganiratāḥ*, and are counted as seven and twenty, i. 66. 16-17; ix. 35. 45; xii. 207. 24; 343. 57, etc.

The twenty-seven asterisms are divided into nine-day weeks (*navarātra*) by groups of three (of nine each, beginning with *Āśvinī*, *Maghā*, *Mūla*, respectively, according to the scholiast), and, according to this division, a *gṛdhra*, or evil heavenly body, *pāpagraha*, has a different effect on the fortunes of men, if we may further trust this expansion on the part of the scholiast of B. vi. 3. 31,

*triṣu sarveṣu nakṣatranakṣatreṣu, viśāmpate,
gṛdhraḥ sampatate śīrṣaṇi (!) janāyan bhayam uttaman,*

which might refer to a three-fold division of the year according to the seasons already mentioned.² The *Rbhus*, however, are mentioned merely as divinities of the gods, eternal and changeless under the aeonic changes, *devadevāḥ sanātanaḥ*, iii. 261. 19-22:

na kalpaparivarteṣu parivartanti te tathā.

The twenty-eight asterisms are said to "enter the circle of the sun" in the West and then, on account of their association with the moon, to fall out of the sun again, after twenty-eight nights are past, v. 110. 15-16:

*ataḥ prabhṛti sūryasya tiryag āvartate gatiḥ
atra jyotiṃśi sarvāṇi viśanty ādityamaṇḍalam
aṣṭāviṃśatirātraṃ ca caṅkramya saha bhānunā
niṣpatanti punaḥ sūryāt somasaṃyogayogataḥ.*

Twenty-eight asterisms are implied at ix. 34. 6, where forty-two days pass from *Puṣya* to *Śravaṇa* (= 22 + 20, *Puṣya* being sixth and *Śravaṇa* twenty-first).

¹ But cf. TS. i. 7. 7. 2; ŚB. x. 5. 4. 5; Whitney, OLS. ii. p. 360f., with citations.

² C. 98 has *triṣu sarveṣu pūrveṣu nakṣatreṣu . . . śīrṣe*. With B. cf. RV. x. 61. 10f., on the *Navagvas*.

The full list of the asterisms, as developed at xiii. 64, is as follows. I supply the equivalent forms from other passages, chiefly in the same book (giving only epic data); see. *nakṣatram* :

1, Kṛttikās, Kṛttikāyoga, *āgneyam, vahnīdāivatam*; 2, Rohiṇī, *prajāpatyam, dhruvam*; 3, Mṛgaśiras, Mṛgottama, *soma-dāivatam*; 4, Ārdrā; 5, Punarvasu, also dual, viii. 49. 28, required, where C. 2,328 has sg.; 6, Puṣya,¹ Tisya; 7, Āśleṣā, sg. and pl.; 8, Maghā (N. *pītriyam*), sg. and pl.; 9 and 10, Phalgunī, *pūrvā, uttarā, uttarāviṣaya*; sg., pl., dual,² *bhagadāivatam*; 11, IIasta, *sāvītram*; 12, Citrā (Mitra? see below); 13, Svāti, Svāti, Svātiyoga; 14, Viśākhā, sg., dual, pl.; 15, Anurādhā, sg. and pl., *nūāitram*; 16, Jyesthā, *āindram*; 17, Mūla; 18 and 19, Aśādhā, *pūrvā, uttarā*; 20, Abhijit, Abhijita(-yoga); 21, Śravaṇa, sg. and pl.; 22, Dhanīṣṭhā, sg. and pl.; 23, Śatabhiṣā(-yoga), *vāruṇam*; 24 and 25, Proṣṭha-, Bhādrapadā, Bhādrapada (-yoga), *pūrvā, uttarā (-yoga)*;³ 26, Revatī; 27, Āśvinī, sg. and pl.; 28, Bharanī, sg. and pl.

Śravaṣṭhā, the older name of Dhanīṣṭhā, does not appear to be used. Abhijit is lacking in the alternate list (below). The addition of *yoga* is common, the asterism appearing either as a noun (above) or as an adjective, as, for example, in *adya pūṣyam yogam upāiti candramāḥ*, "to-day the moon enters its Puṣya-conjunction" (a suitable time for a wedding), i. 198. 5. In the same way, *maghāviṣayagāḥ somah*, vi. 17. 2.

Like the *nakṣatriyaḥ prajāpatīḥ*, "whose hand is IIasta and head is Citrā," in TB. i. 5. 2. 2, is the identification made during the moon-rite, *cāndramrata*, at xiii. 110. 2f., in which the worshipper identifies himself with the moon as anthropomorphized from the feet up in the asterisms.⁴ The month is Mārgaśīrṣa, and the moon's feet are Mūla; the knees and thighs,

¹ Instrumental asterism, with which, all the others locative. So in the list at xiii. 89, except for Hasta and Abhijit (means): *hastena phalabhāg; śrāddham tv abhijitā kurvan bhikṣak siddhim avāpnuyāt*, śl. 11.

² *uttarābhyām phalgunībhyām nakṣatrābhyām aham divā, jāto himavataḥ prṣṭhe, tena mām Phālgunam vidaduḥ*, iv. 44. 16 (cf. Arjuna, Arjunī=Phalgunī).

³ V. 114. 3: *nityam proṣṭhapadābhyām ca śukre dhanapatāu tathā, manuṣyebhyaḥ samādatte śukrah (dhanam)*; xiii. 89. 13: *pūrvaproṣṭhapadāḥ kurvan bahūn vindaty ajāvikān, uttarāsu prakurvāṇo vindate gāḥ sahasraśaḥ*.

⁴ Compare also the *nakṣatrapuruṣaka* of BS. cv.

Aśvinī and Aśādhā; the hands, Hasta, etc.; while Citrā is replaced in B. by Mitra (C. has *citrām*, sic), as follows: *netre mṛgaśīro vidyāl lūlāte mītram eva tu*, śl. 8 (probably metrical). In this list the double asterisms are Phālgunī (sic), Bhādrapada, sg.; Aśādhā, dual; while Nos. 8, 15, 21, 27, 28 are singular, and Nos. 7, 14, 22 are plural.

Various periphrases take the place of the names of the asterisms elsewhere in the epic. In xiii. 126. 36, *gajacechāyāyām pāvasyāṁ kutape . . . yadā Bhādrapade māsi bhavate bahule maghā*, the "elephant's shadow," as in Manu iii. 274, Yāj. i. 218, is probably a constellation. According to the scholiast at xiv. 63, 18, *nakṣatre* "*hami ca dhruve*, both Rohiṇī and the Uttarātraya (cf. BS. *loc. cit.*, PW. s. v.) bear the name *dhruva* (Nos. 2 and 10, 19, 25). No. 1 is *vahniḍāivatam* also in i. 221. 85; No. 16, Jyeṣṭhā, called by N. *jyeṣṭhānakṣatra*, is regarded as Indra's (*āindram*, i. 123. 6). The place of Anurādhā, No. 15, is taken by *māitranakṣatra-yoga* in ix. 35. 14. In xiii. 89. 12, Śatabhiṣā (epic for *-bhiṣaj*), No. 23, is the *nakṣatrain vāruṇam*; and in i. 8. 16, Phalgunī (*uttarā*, No. 10) is (for marriage) *bhagaḍāivatani nakṣatram*. The "five-star" asterism, Hasta, No. 11, is called *sāvitram pañcatāram*, i. 135. 30. On *Śakraḍevatā* (not of No. 16, Jyeṣṭhā, but) *amāvāsya*, see above, p. 24; note. According to xiii. 104. 127 f., one should not perform a Śrāddha under one's natal asterism, nor under the two Proṣṭhapadās, nor under Āgneya (the Kṛttikās). The name Tiṣya for Puṣya, No. 6, occurs in connection with the planet Bṛhaspati in the well-known prophecy at iii. 190. 90 f.:

*yadā sūryaś ca candraś ca tathā Tiṣya-Bṛhaspatī
ekarāśāu sameśyanti prapaśyati tadā kṛtam,*

"the perfect age will come again when sun and moon and the asterism Tiṣya with the planet Jupiter shall meet in one zodiacal sign."¹ Cf. *brahmarāśi* below. Possibly the (solar) zodiac here referred to may have an earthly counterpart in the process of divination known as *mṛgucakra*, alluded to at v. 48. 98 f.:

¹ The epic poet does not hesitate to make the planets Jupiter and Saturn stay a year in one asterism (as a bad sign), vi. 3. 27. See under Planets, below. Tiṣya was the birth-place of Jupiter, according to TB. iii. 1. 1. 5, cited by Tilak, *The Orion*, p. 161.

sānvatsarā jyotiṣi cā 'bhīyuktā
 nakṣatrayogesu ca niścayajñāḥ
 uccāvācāni dāivayuktāni rahasyāni
 divyāḥ praśnā mṛgacakra mūhūrtāḥ,

“astrologers and star-seers and those that tell fate by asterisms, secret prognostications, oracles, wheels of fortune, soothsayers(?).” I take *mūhūrtā* to be a metrical equivalent to *māhūrtā*, a soothsayer—astrologer. The latter word is found in xii. 121. 46, as in later literature. As to *mṛgacakra*, “animal-wheel,” it seems to be what the modern Hindus call the “wheel of the nine planets” (compare *śatupada=cakre*), a sooth-saying device much in evidence at the beginning of the plague in 1896. The commentator explains it doubtfully as a *pūrvanīpāta* for *cakramṛga* (asking questions with a wheel), according to the use prescribed in the Śivaite scriptures; the questions being astrological, “what is the asterism, by what planet is one injured?” Perhaps it is a zodiac wheel.

As in the stanza cited above, the asterisms are frequently brought into connection with the planets. Thus, in iii. 281. 6, “he looked like Saturn entering Rohiṇī.” Another example occurs in xiii. 25. 22, where one is advised to perform ablutions at Great-Ganges, *kṛttikāṅgūrake*, “when Mars is in the Pleiades.”

In indicating time, the day and asterism are usually in the locative; the month, locative or genitive: *aṣṭame 'hanā Rohiṇyām prayātāḥ Phālgunasya te*, “they started on the eighth (day) of Phālguna under the asterism Rohiṇī,” i. 145. 34; *kṛṣṇapakṣe caturdaśyām rātrāu*, “at night on the fourteenth (day) in the fortnight after the full moon,” i. 147. 4; *Mārgaśīrṣasya māsasya candre Mūlena saṁyute*, “when the moon of the month Mārgaśīrṣa is in conjunction with the asterism Mūla,” xiii. 110. 3; *Pāuṣamāsasya. śukle vāi yadā yujyeta Rohiṇī*, “when Rohiṇī is in conjunction in the fortnight before the moon is full in the month Pāuṣa,” ib. 126. 48. With the month in the locative and the fortnight in the genitive: *Kārtike māsi cā 'śleṣābahlulasyā 'ṣṭamī*, “the eighth (day) of the fortnight after the full moon in the month Kārtika under the asterism Āśleṣā,” ib. 132. 7. With the new (and “full-moon”) day, “month” is unnecessary (in xiii. 134. 4, *somasya 'ttīṣṭhamūnasya*

pāurnamāsyām balim haret, the moon is object, "one should make an offering to the moon as it is rising on the full-moon night").

The passage referred to above, p. 15, containing the words *Śravaṇādīni ṛkṣāṇi*, "the asterisms begin with Śravaṇa," is of some importance for the date of the epic as well as for the way it was put together. In the lists already cited, the Kṛttikās, or Pleiades, begin the series of asterisms, while Śravaṇa is the twenty-first in the list, coming just before Dhanīṣṭhā = Śraviṣṭhā. As late as Yājñavalkya's law-book, i. 267, the Pleiades hold this position, as opposed to the still later scheme (since c. 490 A.D.) beginning with Aśvinī (to indicate the vernal equinox). The Vedāṅga Jyotiṣa list begins with Śraviṣṭhā, and Garga says that the Kṛttikās are the first asterism for the ritual, while Śraviṣṭhā is first for ordinary reckoning: *karmasu kṛttikāḥ prathamam (nakṣatram) śraviṣṭhā tu samkhyāyāḥ* (cited by Tilak, *The Orion*, p. 30).

Now we can scarcely believe that the stanza stating that Śravaṇa is the first asterism refers only to the quality of the asterism as the best or foremost, since in the same stanza the relation of day to night is expressly that of priority and not of superiority. Nor is there here any reference to an "abortive attempt" to reform the calendar, as is claimed by Tilak, *op. cit.*, p. 216. The fact is that even in i. 71. 34, where the change of the sphere is described, the act is not spoken of as abortive, but as one that succeeded. The translation of this latter passage, however, is not so certain as Tilak assumes; though the change of asterisms is apparently described as actually occurring. We are told that Viśvāmitra, in his anger, did several wonderful things. As he caused the river, Kāuśikī, to change its name to Pārā, so also "he made another world with a right arrangement of asterisms,"

cakārā 'nyam ca lokam vāi kruddho nakṣatrasampadā.

Then follows:

pratiśravaṇapūrvāni nakṣatrāṇi cakāra yaḥ,

the obvious, though rather pointless meaning of which would be that "he made asterisms which had a prior promise." By separating the compound and giving *pūrva* the sense of *ādi*, Tilak arrives at the meaning "he made the asterisms begin with

Śravaṇa." But even if this be a doubtful rendering, we have here the statement that Viśvāmitra did rearrange the asterisms, and in xiv. 44. 2, the statement (but without allusion to this story) that Śravaṇa is the first asterism. In another passage, which describes how Abhijit, because she was jealous of Rohiṇī, her elder sister, retired from the group and became "a star fallen from heaven," *nakṣatranī gaganāc ccyutam*, Abhijit is replaced by the Pleiades. This is a tale, thus far without historical meaning (except as showing that Abhijit was regarded as originally in the group); but in the quandary as to what was to be done when Abhijit retired, it is said that

dhaniṣṭhādīs tadā kālo brahmaṇā parikalpitaḥ,

"time was arranged by Brahman to begin with Dhaniṣṭhā," iii. 230. 10, which can mean only that this asterism was the first of the group.

We thus have a legend peculiar to the later epic describing a rearrangement of the asterisms; a decided difference between different parts of the epic in regard to the first asterism; and the probability that Śravaṇa was made the first asterism because the Vedāṅga system was no longer suited to the seasons, which had already receded a fortnight. In other words, the substitution of Śravaṇa points to a late date (approximating the modern substitution of Aśvinī) for these passages in books i. and xiv.

In the Purāṇas and classical literature, the *nakṣatrāṇi* are called *ṛkṣāṇi*, and this name is found appropriately enough in what is most certainly a pseudo-epic passage, xiii. 14. 37,

stobhā ṛkṣāṇi pītarō grahāḥ,

where the context shows the special meaning to be that of *śravaṇādīni ṛkṣāṇi* in the other verse from the pseudo-epic, upon which I have just animadverted.

Of the far-reaching results drawn by Mr. Tilak from a study of the stars as affecting the date of the earliest Vedic literature, this is scarcely the place to speak, since my study is confined as closely as is convenient to epic conditions. But I would suggest the consideration of two facts. The first is that the loose and casual references to the minor heavenly bodies, and the

indifference with which they were regarded by the earliest depositaries of sacred wisdom make it improbable that any careful astronomical calculations were based upon them at a still earlier, pre-Vedic, period. The second is rather a corollary than a contradiction of this fact, namely, that though but little used as chronological guides, the stars are often regarded in their more obvious appearance, and there is no objection to postulating a primitive acquaintance with and veneration for brilliant stars, especially groups of stars, marking a seasonal change. Thus the savages of the South Sea Islands, though they can scarcely be said either to be star-worshippers in general, or to measure time by the stars, reckon the year (with thirteen moons) as beginning with the rising of the Pleiades just after sunset, about the middle of December, and "pay idolatrous worship to them."¹

THE PLANETS.

The planets, or rather the *grahas*, which include the planets, are reckoned as a group of five (so RV. i. 105. 10 ?) or seven in the early epic; but the later epic makes them nine in number. The order in which they are named is interrupted by the intrusion of the additional *grahas* and even of gods, but it appears in xiii. 166. 17 as Venus, Jupiter, Mars, Mercury, Saturn, where Bhāuma, for Mars, is noteworthy. The eclipse-demon, Rāhu (whose dimensions, according to the epic, together with those of the sun and moon I have given in this Journal, vol. xxiii. p. 154), here appears between Budha and Śanāīscara (Mercury and Saturn). In iii. 3. 17, the order is Jupiter, Venus, Mercury, Mars, Saturn. Here Mars is, as usual, Aṅgāraka. The group begins with the moon and Saturn is added after Indra, the sun, Agni, and Kṛṣṇa; the whole group being preceded by the group of the five elements:

*somo bṛhaspatiḥ śukro budho 'ṅgāraka eva ca
indro vivasvān dīptāṅśuḥ śuciḥ śāuriḥ śanāīścaraḥ.*

¹ Compare Gill, *Myths and Songs*, p. 317: "The Pleiades were worshipped [as harbingers of the new year] at Danger Island, and at the Penrhyns, down to the introduction of Christianity in 1857. In many islands extravagant joy is still manifested at the rising of this constellation out of the ocean."

According to v. 34. 54, the stars, *nakṣatrāṇi*, are affected by the *grahas* (N. sun, etc.). In vi. 17. 2 are mentioned "seven great *grahas*," *mahāgrahāḥ*, where the scholiast says that there are nine in all, "as Rāhu and Ketu are to be added as *upagrahas*." These *upagrahas* are recognized late in the epic, being mentioned in the Mārkaṇḍeya episode, iii. 227. 1, with the *grahas*, seers, and mother-goddesses. In vi. 77. 11, where the sun is surrounded by *krūrā mahāgrahāḥ*, Rāhu, though the number is not stated, may be included. The technical name for hostile planets is here used. So in vii. 137. 23, "the seven Mahārathas oppressed Bhīma as the seven *grahas* (oppress) the moon at the destruction of living creatures" (*somaṁ sapta grahā iva*; compare the "seven suns" active in *pralaya*). In viii. 37. 4,

nīḥsaranto vyadrśyanta sūryāt sapta mahāgrahāḥ.

The meaning, according to the scholiast, is that the *grahas* appeared advancing with the sun as the first of the seven.

In all these cases, when the number is given we find it to be not more than seven. But the ascending and descending node, Rāhu, Ketu, are mentioned together with the sun and moon and the planets Saturn, Mars, Jupiter with Venus, Mercury, in xiii. 17. 38, if we may trust the scholiast, who says that *grahapati* is for Maṅgala (Mars) and *vara* is for Brhaspati and Śukra; *atri* being for Budha and Śani (as elsewhere) for Śanāścara. They are forms of God, who is the *nidhi*, highest number, the thousand-eyed *soma*, the *nakṣatrasūdhaka*, and

*candraḥ sūryaḥ śanīḥ ketur graho grahapatir varaḥ,
Atriḥ, etc.*

While it is doubtful whether the scholiast is right in this case, another late passage expressly reckons the *grahas* as nine, iv. 2. 21:

*yam manye dvādaśaṁ rudraṁ ādityānāṁ trayodaśam
vasūnāṁ navanāṁ manye grahāṇāṁ daśanāṁ tathā,*

where the tenth *graha* implies nine others. The sun, though sometimes not a *graha*, is expressly called a *graha*, and is lord of *grahas*, *sūryo grahāṇām adhipo nakṣatrāṇāṁ ca candra-māh*, xiv. 43. 6. At iii. 200. 85, are mentioned *grahāḥ sūryādayo divi*, "the *grahas* beginning with the sun," all being reckoned as *dāruṇaḥ* or *śivāḥ*, unfavorable or favorable, according

to circumstances. Conversely, the planet Saturn is the son of the sun and Jupiter is reckoned among the suns, *ādityeṣv eva ganyate*, in i. 66. 39, as Śukra (Venus) is Bhṛgu's son, a planet meteorologically active, *varṣāvarṣe bhayābhaye*, ib. 42, though regarded also as the female side of Brhaspati (Venus and Jupiter).

Sporadic mention of the planets (five in number in vi. 100. 37, *grahāḥ pañca*, opposed to the sun; and to the moon, ib. 38) is common enough. In vi. 101. 59, two heroes are compared to Mercury and Venus; and ib. 104. 21, to Mercury and Saturn. The last is named also in ix. 16. 10, (*rane*) *candramaso 'bhyāśe śanāīścāra iva grahāḥ*, Saturn near the moon illustrating Śalya near Yudhiṣṭhira in battle. Such references are found not infrequently: *aṅgāraka-budhāv iva*, two heroes, "appeared like Mars and Mercury," viii. 15. 16; *nakṣatram abhito vyomni śukrā-ṅgirasayor iva (yuddham)*, a battle such "as in heaven is the battle of Venus and Jupiter respecting an asterism," ib. 17. 1; *vakrātivakragamanāḥ aṅgāraka iva grahāḥ*, a hero storms about "like the planet Mars returning in his orbit," ib. 19. 1.

In the same book, in which occur most of these allusions, viii. 18. 5, another reference has a pun on the word *graha*, the "seizer:"¹

*sa Māghadānām pravaro 'nikuśagrahe
grahē prasahyo vikaco yathā grahāḥ,*

where *vikaca* is "the headless one," Rāhu, who is here a "seizer," but is not grouped with the planets.

Bad signs are given by the planets. In vi. 3. 12 f., the "white *graha*," Ketu, passing Citrā stands still; a great *graha*, a comet, *dhūmaketu*, attacks Puṣya (the warrior's asterism); Mars, *aṅgāraka*, turns among the Maghās, *maghāsu vakrah*; and Jupiter turns in Śravaṇa; the sun's son, Saturn, attacks Pūrvā Phalgunī, *bhagaṁ nakṣatram*; Venus shines in Pūrvā Proṣṭhapadā and going about in Uttarā associated (with an *upa-graha*) desires attack; the white *graha* attacking Jyēṣṭhā, *ān-draṁ nakṣatram*, stands still. The Pole-star (? *dhruva*) flames;

¹ Compare ŚB. iv. 6. 5. 1 f., where the sun is a *graha* and "the whole Brāhmaṇa is a play on the word *graha*," as Eggeling says (cf. ib. xiv. 1. 4. 2).

sun and moon distress Rohiṇī; between Citrā and Svāti is the fierce *graha*; and Mars, *lohitaṅga*, turns about Śravaṇa, called here (so N.) *Brahma-rāśi*. So in v. 143. 8 f., and viii. 94. 49 f., the “son of the moon,” Mercury, goes transversely, being fire-colored; while Jupiter, encircling Rohiṇī, becomes moon-colored. In ix. 11. 17, Venus and Mars with Mercury go behind the Pandus, portending the fate of their foes. Here Venus is “Bṛghu’s son” and Mars is the “son of earth,” *dhurāputra*, while Mercury is again the “son of the moon,” *śaśija*. When the moon is upside down and the planets encircle the sun to the left, something terrible will happen: *apasavyam grahāś cakrur alakṣināṇam divākaram, avākśirāś ca bhagavān upātisthata candramāḥ*, vi. 112. 12.

There is no passage in the epic which gives the Greek order of the planets, Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, and this fact, according to Professor Jacobi, ZDMG. xxx, p. 307, would imply that the date of composition was not later than the third century A.D. This would be valid for the greater part of the epic, but would not exclude the possibility of still later additions having nothing to do with planets. The rare mention of the group of nine *grahas*, confined to what we may unhesitatingly call the later part of the epic, shows that the *grahas* in the early epic were reckoned only as five, or seven with the sun and moon added, without recognition of the nodes, Ketu and Rāhu, as part of the “group of nine planets.”

That the heavenly bodies are sentient creatures needs scarcely be observed. The planets have merit, *puṇya*, after losing which, *kṣīṇapuṇyāḥ*, they fall (as shooting stars); and they become sad when they see distressing sights. Thus in i. 210. 26: “moon and sun, the *grahas*, the stars, the asterisms, (all) the inhabitants of the sky, beheld the deed, became despondent.” For varied views on this point, see my *Great Epic*, p. 380. The formal adoration of planets in connection with Gaṇeśa is recommended in Yāj. i. 292 f., who recognizes nine *grahas*, sun, moon, son of earth, son of moon, Bṛhaspati, Śukra, Śanāiscara, Rāhu, Ketu. Their worship consists in making metal or pictured models, to which are given clothes, flowers, incense, rice, etc.; and to each planet eight hundred and twenty-eight pieces of a special kind of wood (burned for each); rites later than epic ideas, to judge from silence on a theme so attractive.

SUN, YEARS, AGES, AEONS, AND CYCLES.

The extended astronomical phraseology of the late epic may be illustrated by the gift-land in iii. 200. 125 f., where occurs the advanced technicality implied in the word *ṣaḍaśtītimukha*. After stating that a gift at the time of the new moon or the full moon has a double value and that a gift at a season-time would be of ten-fold value, *parvasu dviguṇaṁ dānam ṛtān daśaguṇam bhavet*, the poet adds that the reward would be endless if one gave gifts at the equinox, *viṣuva (tulāmeṣasani-krāntyoḥ, N.)*, when the sun is *ṣaḍaśtītimukheṣu*, that is (the sun's path being divided into arcs of 86°, commencing with the autumnal equinox, JAOS. vi. p. 410 f.), entering Gemini, Virgo, and Pisces (*mīthunakanyāmīnasani-krāntiṣu, N.*), or at the eclipse, *uparāge* (eclipsed is *upaphuta*, passim), of the moon and sun. This information is conveyed in *ślokas*. Part of it is then repeated, amplified, and embellished by being stated over again more artistically:¹

*ṛtuṣu daśaguṇaṁ vadanti dattān
 śataguṇam ṛtvayanādīṣu dhruvam
 bhavati sahasraguṇaṁ dīnasya Rāhor
 viṣuvati cā 'kṣayam aśnate phalam.*

At the same time, though one or two other passages (see above, p. 32) point to the recognition of the solar zodiac, I cannot believe that this was known in the epic period; for in that case there would inevitably have been references to some *samīkrāntī*, which term, however, does not once appear.

Time is often measured by groups of five divisions, either as "months, seasons, semesters, years, ages," as in xii. 47. 66, or without ages and with day and night, of which the world is made: *ahorātramaye loke*² . . . *mṛtyur grasati bhūtāni pavanam pannaḃge yathā*, xii. 299. 29. It is this latter group which Nīlakaṇṭha thinks has given to Viṣṇu, in xii. 339 (66), his title of Pañcakālakartrpati, "lord of the five makers of time;" though as Pañcarātrika follows and as Nīlakaṇṭha also gives the five as those of Gītā, 18. 15, the real application of the epithet remains doubtful. In xiii. 149. 60, Viṣṇu is *nakṣatranemir nakṣatrī*.

¹ For the irregular form of the meter, see my *Great Epic*, p. 344.

² Compare the Anugītā, xiv. 45. 2 f., where the "wheel of time" turns on day and night, *ahorātraparikṣepam*, but is counted, *ganitam*, by months and half-months.

The period of day and night, the months, and the seasons having been discussed, there remain the year and greater periods of time. The year (*pratīvatsara*, ii. 74. 19, and *śārada*, iii. 99. 24, are unique; other designations are those current, *varṣa*, *parivatsara*, etc.) is divided most frequently (as in RV. i. 164. 48, etc.) in metaphors. In the "forest of the great world," *kāntāra*, there is "a black and white elephant, having six faces, twelve feet," the year with its dark and light halves of the month, seasons, and months, xi. 5. 15; 6. 11. Two men dance hand in hand and six men play with golden dice (day and night and the six seasons), xiii. 42 and 43. 4f. The whole year is measured by the "twelve-fold sun," which is spoken of as becoming "twelve suns," *dvādaśādītyatām gataḥ*, iii. 3. 59, *dvādaśātman*, ib. 26; *dvādaśā dītyān kathayanti 'ha dhīrāḥ*, iii. 134. 19. This is God's form at the destruction of the universe: "as twelve suns" he destroys, xii. 313. 4. Again, the year is a wheel of twelve spokes, turned by six boys, while two girls weave black and white threads; this wheel, however, also having three hundred and sixty spokes and twenty-four divisions, *parvayoga*, i. 3. 146 (also xii. 246. 32). Compare iii. 133. 24f.:

*triṅśakadvādaśānśasya caturvīṅśatiparvāṇaḥ
yaḥ triṣaṣṭiśatārasya vedā 'rtham sa paraḥ kavīḥ
caturvīṅśatiparva . . . śaṇṇābhi dvādaśapradhī
tat triṣaṣṭiśatārāṇi vāi cakram,*

which adds the "group of thirty," *triṅśaka*, as one of the divisions, twelve months of thirty days each. In xiii. 159. 23, the year as the wheel of time has three naves, seven steeds, and three divisions, *trinābhi*, *saptāśvayuktam*, *tridhāma*; the first implying the periods of cold, heat, rain; the last, rain, wind, heat; according to the scholiast (compare RV. i. 164. 2). In i. 3. 58, the weaving of the year appears again, but a new metaphor follows, that of three hundred and sixty cows having one calf, ib. 60; and ib. 61 the wheel again has seven hundred and twenty spokes. The wheel of time is analyzed in ii. 11. 37, as having divisions of *kṣaṇas*, *lavas*, *muhūrtas*, day and night, half months, months, seasons (six), years, the cycle of five years, *pañcayuga*, and the "four-fold day and night," *ahorātraś caturvīdhaḥ*, that is, as they belong to men, Manes (whose day is a moon-month), to gods (measured by years), and to Brah-

man (measured by ages). This is the sole passage in the epic recognizing the five-year cycle by that name (Brāh. *pañcakanī yugam*). It may be inferred from the attempt made to bring the solar and lunar year into line in iv. 52. 3,

pañcane pañcane varṣe dvāni māsāv upajāyataḥ,

where, in Vedic phrase, RV. i. 25. 8, there is a calculation of the months "born after;" though here an estimate is made of the difference in the course of thirteen years between the lunar and solar years. The epic here uses the technical term, *abhyadhika*, and says that in this period five months and twelve days would be in excess,

*eṣām abhyadhikā māsāḥ pañca ca dvādaśa kṣapāḥ
trayodaśānāni varṣānām.*

The difference is caused by "excess of time," *kālātirekheṇa*, and "the transit of luminaries," *jyotiṣāṃ ca vyatikramāt*.¹ In this passage the "wheel of time" suffers "partition" into the elements already mentioned, *kalā*, *kāṣṭhā*, *muhūrta*, *dina*, including asterisms and *grahas* as time-recorders, after fortnight, month, season, and year.

Two other passages may possibly refer to the five-year cycle by implication and suggestion. One of these is that containing the pseudo-epic name of Viṣṇu, Vatsara, xiii. 149. 63, as this is the name of the year of a cycle; and the other is the passage, i. 124. 22, likening the (group of) five Pandus to years: *anuvatsaram jātāḥ*. . . *Pāṇḍuputrā vyārājanta pañca sanvatsarā iva*, "like (the group of) five years." The sixth-year intercalated month of thirty-six days (SB. ix. 1. 1. 43; x. 5. 4. 12) is not recognized in the epic.

After the time-table given above, p. 13, which is virtually that of the later first book of Manu and of the Purāṇas, the epic poet, like the law-giver, continues with an account of greater periods of time. The sun, as is often said, is the chief divider of time. God is "the fruit in the acts accomplished in the moments and other (time-divisions) of the sharp-rayed sun," xiii. 14. 419. The sun divides the day and night into work-time and sleep-time. In the day and night of the Manes, the bright fortnight

¹ In five years there are sixty days over; in thirteen, one hundred and fifty-six days, five (lunar) months and twelve days ($156 - 12 = 144 \div 5 = 28\frac{4}{5}$).

is their day and the dark is their night ! Manu inverts the order, 1. 66 ; but here, *kṛṣṇaḥ svapnāya sarvavāri*, etc., there is a confusion of men and Manes. A year of man is a day and night of the gods. The northern course of the sun in their day ; the southern, their night. Their are four ages, *Kṛta*, of four thousand years, etc., as in Manu, with the "twilight periods of just as many hundreds ;" each later age losing a quarter, *'ekapādena hīyante*, in thousands and hundreds. In vi. 10. 3, the name of the fourth age, *Kali*, is *Tiṣya*. The length of the ages is stated again, as just given, in iii. 188. 22 f., but without aconic speculations added. The moral qualities of each age are often described ; at length, for example, in iii. 149. According to the usual later view, the *Kali* age begins with the death of *Kṛṣṇa* ; but according to v. 142. 8 f., at the very beginning of the great war, though probably the moral and not the chronological side is emphasized in *Kṛṣṇa*'s repeated words, *na tadā bhanitā tretā na kṛtāni dvāparāni na ca*. That "the *Rāj* makes the age" is an epic truism that discounts all chronology. As to how the ages got their twilights, see Mr. Aiyer's *Chronology of Ancient India*, p. 129, where it is shown that one-tenth of the age makes the twilight, as the twilight of a day is one-tenth of a day of twelve hours, measuring 3 *ghaṭikās*, 1 h. 12 m.

The sum of the thousands and hundreds (to continue the timetable already cited) is twelve thousand (years). Both seers and mathematicians, *saṁkhyāvidah* ; recognize this age, *yuga*, of twelve thousand (years) ; and one thousand such ages (12,000,000 human years) are equal to a day of Brahman, whose night is of the same length, *sahasrayugaparyantam*, xii. 232. 15 f. Nothing is said here of divine Yugas. In xii. 343. 3, the period of creation lasts till the end of a thousand *caturyugas*. The day of Brahman is again recognized as a thousand Yugas in iii. 3. 55 and vi. 32, 17, with no intimation that the Yuga is other than that of the twelve thousand human-year Yuga. The *divyaṁ varṣasahasram* is a commonplace in tales, as in the account at iii. 173. 7 of *Dāitya* austerities. According to xii. 227. 70, the (Vedic) gods live only a thousand (divine) years, *varṣasahasrāntam*.

The aeons, Kalpas, mark a greater period. At the end of a Kalpa the creative eighth of God changes, *parivartate*, xii. 281.

63. The Kalpa is thus one day of the creator-god (1000×12000 years) and forms a new unit. It is in such units that the day of Brahman is reckoned in the later epic, xii. 312. 1f. The day of the Unmanifest is "twice five thousand Kalpas," *pañca kalpasahasrāṇi dviguṇāṇy ahar ucyaṭe*, and his night is the same. He creates, when he wakes, the demiurge creator, Brahman, and the latter's day is the same length less a *pāda*, *daśa kalpasahasrāṇi pādonāṇy ahar ucyaṭe*. Thus Brahman's day is now reckoned as one quarter less than that of the Unmanifest, or as seven thousand five hundred Kalpas, "and his night is of the same extent."¹

According to Manu, 1. 71 f., the total of four ages, consisting in all of twelve thousand (human) years, is one age of the gods, and a day of Brahman is a thousand such divine ages, the expressions being *caturyugam* (*dvādaśasāhasram*) as *devānāṃ yugam*, and *dāvīkānāṃ yugānāṃ sahasram* as *brāhmaṇa ekam ahaḥ*. Now in xii. 208. 9, Soma is represented as a *paryupāsītā*, ascetic reverer (?), during a thousand divine ages, *sahasraṃ divyānāṃ yugānāṃ*, which should be a day of Brahman; and in xii. 328. 24, Mahādeva stands, as an ascetic, on one foot during a *divyaṃ varṣasahasram*, or thousand years divine (of the gods). But in xii. 303. 14, as in the Kalpa enumeration above, the day of Brahman is reckoned not in ages, Yugas, but in aeons, Kalpas, albeit not of the same sort:

*yugaṃ dvādaśasāhasraṃ kalpaṃ vidhi caturyugam
daśakalpaśatāvṛttam ahaḥ tad brāhmaṇa ucyaṭe,*

"know that twelve thousand (years) are an age; a total of four ages, an aeon; the day of Brahman is said to be ten hundred times an aeon." Nīlakaṇṭha interprets the years and ages as divine, and the Kalpa as a thousand *caturyugas*, the Kalpa thus being a day of Brahman. This certainly cannot be extracted from the text, though it is the orthodox view. Nīlakaṇṭha at this place reckons out the year of Brahman in divine days and years, which gives the usual Puranic creative period. But a thousand *caturyugas* being the usual epic view of a day of Brahman, the text above is uncombinable with other epic data,

¹ The third creation (Ego-creation) and sense-creation have, respectively, days of five and three thousand Kalpas. ib. 11 and 15.

and must be twisted out of its real meaning to be in accord with them.

Two passages give the duration of a single spirit's reincarnations, in which the *jīva* is supposed to wander. In xii. 304. 44; 305. 1 (continuation of the passage above) the spirit passes through *sargakotisahasrāṇi* or thousands of crores of creations; and in xii. 281. 36 and 43, every *jīva*, in a Buddhistic passage, passes through fourteen hundred thousand courses on its way to perfection; eight hundred periods of *samhāra-vikṣepa* in man's estate alone.

Only the later epic knows the Mahā-kalpas by name. Thoroughly Puranic are the passages; xii. 337. 1, *tato 'tite mahākalpe*; 340, 115, *mahākalpasahasrāṇi mahākalpaśatāni ca samatītāni rājendra sargāś ca pralayāś ca ha*. So in xiii. 107. 77, *phalam padmaśataparakhyam mahākalpam daśāthikam*; but never any such allusion in the real epic.

After the specimen of time-measures given in my *Great Epic*, p. 206, I need offer no further examples of the epic's tendency to count time by "oceans," *sāgara*, and other similar terms, *puṣṭa*, *puṭākā*, *śaṅku*, *nīlhi*, etc. They will be found, years rolled up to countless billions, in xiii. 107. 21 f., to select only one short passage from the numerous instances afforded by these arithmetical jugglers. As the poets come to consider the extent of time in aeons, creations, *visarga* and *samhāra*, the imagination is stretched to its utmost to devise parallels illustrative of the periods. A particle of sand removed daily from the Himālaya till all the mountain is reduced to the plain; a drop of water daily drawn from thousands of league-long mile-deep lakes till all are drained; such are the images that describe these (pseudo-epic) creations. One will suffice: xii. 281. 30 f.:

samhāravikṣepasahasrakotīs
*tisthanti jīvāḥ pracaranti cā 'nye*¹
prajāvisargasya ca pārīmāṇyam
vāpīśahasrāṇi bahūni, dāitya,
vāṇyāḥ punar yojanavistṛtās tāḥ
krośāṃ ca gambhīratayā 'vayāḍhāḥ

¹ The inanimate and animate world.

*āyāmataḥ pañcaśatāś ca sarvāḥ
 pratyeśaśo yojanataḥ pravṛddhāḥ
 vāpyā jalani kṣīpyati vālakotya¹ tv
 ahnā sakṛc cā 'py atha na dvitīyam
 tāsāṃ kṣaye vidāhi paraṃ visargaṃ
 sanhāram ekam ca tathā prajānām.*

The passage cited above, p. 32, from iii. 190. 90, which speaks of sun, moon, Jupiter and Tīṣya as being together, implies the recognition of the sixty-year Bṛhaspati cycle, as the sun, moon, and Bṛhaspati are in Puṣya once only in this cycle.²

The doctrine of Manvantaras is implied (according to the commentator) in Bali's prophecy at xii. 225. 31. When the sun shining in the meridian, *madhyandine*, ceases to shine from all directions, then there will be war again between the gods and demons. Indra repudiates the idea, however, saying that the sun will never depart from his ordained course. But the Manvantara-theory may well be implied here, for, though foreign to the early epic, the Manvantaras, not only in their earlier form but even in their later fourteen-Manu form, are known to the pseudo-epic. In the early epic, only the Mihira hymn, a late intrusion, recognizes these periods of time. Here, iii. 3. 55-56, a day of Brahman is defined (as above) and the Manus and Manvantaras are referred to. The periods are referred to next in xii. 59. 115 and the first group of Manus is implied at xii. 285. 1, *Vāivasvate 'ntare*, which phase appears again in 337. 56, "when the Tretā Yuga shall have replaced Kṛta in the (Manv)antare of Vivasvat." From here on, the later epic is full of allusions to the Manvantaras: *pūrve ca manvantare Svāyambhuve*, 343. 26; *Manoḥ svāyambhuve 'ntare*, 350. 42; *manvantareṣu*, ib. 43; *Manu Svārociṣa*, 349. 36 f.; *Śanāiśca-rah* (Saturn) *sūryaputro bhaviṣyati Manur mahān, tasmin manvantare cāi 'va Manvādigana-pūrvakaḥ* (*tvam eva bhavitā, vatsa*), 350. 55. In xiii. 14. 38-39, for the first time in the epic, the Manvantaras appear (as protectors, in connection with the wives, maids, and mother of the gods) along with seasons,

¹ The water of the lake as flung out drop by drop with "the end of a hair" seems to be a play on the chronological meaning of *koti*, the "end" of arithmetic thought.

² Compare Aiyer, *Chronology*, p. 183.

years, *kṣanas*, *lavas*, *muhūrtas*, *nimesas* and Yuga-changes. Finally, a Manu of the second group (of seven) appears in xiii. 18. 43, *Sāvarnasya Manoh sarge saptarṣiś ca bhaviṣyati*.

The real epic knows nothing of Great Kalpas and secondary Manvantaras. They belong to the Puranic period including the later epic, but even the first (Puranic) chapter of Manu falls short of the extravagance reflected in Śānti and Anuśāsana. In regard to the cogency of this relation used as an argument historically, it does not appear to me that the remark of M. Barth, *Bulletin*, 1902, p. 30, poses the question properly. Here, in a résumé of a similar argument, M. Barth says: "ces mentions sont rares dans les portions narratives, fréquentes dans les parties didactiques, ce que, à première vue, paraît assez naturel." The light sarcasm would be justified if the preceding words gave the whole situation, but they do not. The narrative portions of the poem are not quite sundered from didactic material, and the point is that such didactic material, though treating of the same matter, treats it in less modern fashion; whereas the treatment of Śānti and Anuśāsana is, in contrast, rather that of the later Purāṇas. Fear of being thought "expert in cutting up the poem" need deter no one from the admission that epic chronology represents an earlier point of view in the early books, and the Puranic point of view in what I call the pseudo-epic. Nay, rather, one might ask, is he an expert historian who thinks that such a difference of view is quite without historical significance?

EXCURSUS. ANALYSIS OF EPIC DATES.

The Pandus were born a year apart, i. 124. 22, and when they first went to Pañcāla they were all proficient in the use of arms. The youngest must therefore have been at least 16 years old, and Arjuna 17 at this time, when they ravaged Drupada's kingdom, i. 61. 31-35; 135-138 (Karna made king of Aṅga, 136). A year after this, Yudhiṣṭhira was installed, 139. 1, and Drupada sought a son to avenge his overthrow, 167. 14 (Arjuna now 18). Some time was spent in conquering the world, 139, but, regarding this as a matter of a few weeks (!), the next stage is marked by the expedition to Vāraṇāvata, where the Pandus spent a year (148. 1, Arjuna was now 19), before they traversed the woods and, after spending quite a long time, *circa*-

rātroṣitāḥ, 168. 3, at Ekacakrā, went to Pañcāla again, 168. 11. Here they remained one year, *parisamvatsaroṣitāḥ*, i. 61. 31, after getting Drūpadī (she was born grown up, like her twin brother), and Arjuna must then have been 20. After this they visited Hastinā, went to Khāṇḍava, and remained there "many years," *samvatsaragaṇān bahūn*, before Arjuna was exiled, i. 61. 35.

Arjuna on being exiled "lived a whole year and one month in the wood" and then sought out Kṛṣṇā at Dvāravatī and took Subhadrā, i. 61. 42,

*sa vāi samvatsaram pūrṇam māsaṁ cāi 'kaṁ vane vasan
tato 'gacchad Dhṛṣṭikeśam, etc.*

Then, after the burning of Khāṇḍava and the gambling at Hastinā, the Pāndus were exiled for 13 years; and the war began on the 14th year, i. 61. 50, etc.

If the "many years" at Khāṇḍava be reckoned only as three, Arjuna would be 23 when exiled for circa two years, act. 25, returning 4 years before the banishment of all the Pāndus, at the beginning of which he would be 29, and at the end of the 13 years, when his son was 16, Arjuna himself would be 42. Part of the years reckoned by Abhimanyu's age is included in the 1 year 2 months of the building of the Sabhā, ii: 3. 37, *māsāḥ paricaturdaśāḥ*.

But discrepancies occur. There is no record of a year spent with Drupada in the full account of the wedding. On the contrary, i. 199-207 imply that the Pāndus return to Hastinā soon after the wedding. Nor is it consistent that the Pāndus, who have already ravaged Drupada's kingdom, should regard it as *apūrvadrṣṭa* on their second journey thither, i. 138 and 168. 6. In i. 141, moreover, Yudhiṣṭhira is clearly not yet installed as heir-apparent, although he had already been installed in i. 139. 1, a year after Drupada's defeat. Even the year spent in Vārāṇavatā (i. 149. 1) seems in i. 146 and 147 to be regarded as a term of a month or a few days. There is no inconsistency in the timeless birth and growth of Bhīma's son, for it is expressly declared to be such; though the period of wandering, i. 156, should occupy some reasonable time omitted in the account above. But the difference between the clear statement of the first book, that Arjuna lived a year and a month in the

wood and then raped Subhadrā, and the subsequent prolongation of Arjuna's exile to twelve years i. 212-221, three years of which are spent at Maṇipur, i. 215. 26, and one each in Dvāraka and Puṣkara, 231, is important for the critique of the epic. Drāupadī's five children were born "at intervals of a year," *ekavarṣānturāḥ*, i. 221. 66, 78, 86, but though Arjuna's son was necessarily born nearly a year after his return, and was a young warrior in the great war, his age at death is not specified. There is a difficulty, however, even here, for Drāupadī's sons born one and two years later are also young fighters and the youngest would be but 14, whereas Abhimanyu at 16 is always celebrated as the youthful warrior par excellence, and 16 is the youngest age at which boys were considered equal to war.

Another discrepancy which gives a comical effect is found in iii. 33. 12, where Abhimanyu, who should now be about four, is solemnly said to be one of those who did not approve of Yudhiṣṭhira's life! At this time the Pandus had lived 13 months in the wood. In iii. 36-37 they still live "some time" before Arjuna starts on his trip. Five years Arjuna passed in heaven, iii. 44. 5; 141. 7; 164. 17, while the Pandus waited five years for him, iii. 50. 12. In iii. 158. 3, the time of wandering is now four years, Arjuna is to be expected about the fifth, *pañcanvān abhitaḥ samān*, and in iii. 165-174. 9 the five years end with Arjuna's return. In iii. 176. 5-8 they "lived six years before and four years with Arjuna," ten *samāḥ* altogether, and it is now the eleventh year in the wood, *ekādaśam varṣam idānī vasamāḥ*. After this they lived in Viśākhaśyāpa forest one year, 177. 17 (with some preliminary marching), and in 177. 20, the somewhat belated twelfth year arrives, *dvādaśam varṣam upapayātām*. The twelve years in the forest are referred to again in 183. 39; 239. 18 as not yet over. In iii. 243. 15, Yudhiṣṭhira cannot rescue Duryodhana personally because of his vow, *kratu*, but he urges his brother to do this! In this (twelfth) year, Karna (already the king of Aṅga) conquers the Aṅgas (and Drupada), and all the north, east, west, and south country (254. 19), including the Yavanas and other foreigners all "in a short time," *kālena nā 'tidirghena*, 254. 33.

A year and eight months now elapse (after the twelfth year has begun) and the Pandus are still in the wood, eating deer (after the Ghosayātrā), *sāṣṭamāsam hi no varṣam yad enān*

upayukṣmahe (eating the deer here), iii. 258. 12 (after the liberation of Duryodhana in 246; here Yudhiṣṭhira has a conversation with Duryodhana after rescuing him).

By this time about fourteen years must have passed since the Pandus were banished, but in iii. 259 the narrative reverts with the opening statement that while they dwelt miserably in the woods "eleven years passed away," as if the twelfth had not yet come. The thirteenth year, however, finally comes, iii. 315. 5, *śeṣaṇi varṣaṇi trayodaśam*, the completion of the twelfth being announced in 310. 41, "what did they do when the twelfth year was over?"

In the fourth book occurs the most glaring inconsistency in the poem. The bow of Arjuna is here said to have been already carried for 65 years by that hero (who is now 40 or 50 years old, according to the contradictory data already furnished), iv. 43. 6. The 13 years of waiting are paralleled by the 13 days which Drāupadī begs to be allowed still to remain in the town, 24. 29, the agreement and the 13th year expiring, iv. 31. 2 and 4, on the Trigarta expedition, though in 47. 4 the 13th year is not yet over, *varṣate tu trayodaśam*, in Duryodhana's opinion. But it becomes now a question of years reckoned as lunar or solar, five months and twelve days being the difference (see above, p. 42). In 26. 3, Duryodhana says that most of the time is past and very little remains, *alpāvaśiṣṭaṇi kālasya gata-bhūyiṣṭhaṁ antataḥ*; in 21. 17, only a month and a half remain. In 48. 5, Arjuna is represented as having been *samāhītaḥ* (and therefore out of practice in fighting) for 13 years, *varṣāṇy aṣṭāu ca pañca ca*; in iv. 49. 6-8, he is said to have learned arms from Śakra for 5 years, as he practiced *brahmacarya* for 5 years and then stole Drāupadī. In iv. 49. 18 Arjuna is said by Kṛpā to be freed, having been deceived, *nikṛtaḥ*, by the Kurus for 13 years, as in 62. 14. The exile in the wood for 12 years is alluded to in 60. 7. Finally, in iv. 72. 14, on the end of the 13th year, *trayodaśe varṣe nivṛtte*, being at Upaplavya, Abhimanyu is married (cf. 23).

In v. 1. 11-13, *varṣāṇi śaṭ sapta ca trayodaśaś cāi 'va sudustaro 'yam*, the 13th year is now ended. In v. 20. 9, the expression *vāsītās ca mahārāṇye varṣāṇi 'ha trayodaśa* seems to imply that the 13 years are passed in a forest; but the sequence recognizes the Virāṭa episode. In v. 21. 13, Karna says the 13 years are not yet past, and puts it as if they still had to stay in

the wood, *yathāpratijñān kālān tañ carantu vanam āśritāḥ*. Although Virāṭa is recognized in v. 22, yet no notice is taken of the sojourn there in v. 26, where indeed it is said (25) that the Kurus live only because they have not yet heard Arjuna's bow, a curious statement in view of iv. 55, etc. The thirteen years (one incognito) are recognized, however, in v. 48. 92, and elsewhere (below).

In v. 52. 10-11 occurs the following śloka, spoken just before the war, at the end of the thirteenth year (the subject is Arjuna):

*trayastrīṃśat samāhūya khāṇḍave 'gnīm atarpayat
jaḡāyu ca surān sarvān nā 'sya vidmaḥ parājayam.*

C has *sūta*, vocative, for *hūya*, and N. interprets "thirty-three years, *samāh*, are past." But this is impossible. B's reading is evidently correct (N.'s comment fits only C!) and the 33 are not years but the gods challenged by Arjuna, *samāhūya* being a common epic word in these circumstances.

Another year appears to be added in v. 79. 19, where the cattle-lifting foray of Virāṭa is alluded to as occurring *saṁvat-saragate 'dhvani*, "on the expedition of a year past" (N. *gata-saṁvatsare*; cf. xi. 3. 16, *saṁvatsaragata*, "a year old"). But in v. 82. 40 it is still only 13 years that Drūpadī has waited for revenge, and Prthā says in v. 90. 47, *caturdaśam idaṁ varṣaṁ yañ nā 'paśyam (Drūpadīm)*, so ib. śl. 60 and 70; and in 129. 47, the queen says, *alam aṅga nikāro 'yañ trayo-daśasamāḥ kṛtaḥ*. The "fourteenth year" merely implies that the thirteenth is ended.

An apparent discrepancy occurs at v. 141. 13. Karna was made king of Aṅga at the tournament, which according to the narrative already given occurred several years before the gambling. Yet in this passage Karna declares that through his fidelity to the Kāurava prince he has enjoyed a kingdom "without thorns" for thirteen years, *mayā trayodaśa samā bhuktam rājyam akantakam*. This may be made to mean that his kingdom has been thornless only since the retirement of the Pandus; but the natural interpretation is that the kingdom has been his only for the time mentioned, for Karna himself is reviewing his life and this is the only allusion in his speech to the kingdom given to him by Duryodhana. The explanation, however, lies rather in the assumption of a poetic lapsus, for the words are

almost identical with those employed by Duryodhana himself in v. 160. 110, where he says to Arjuna, *trayodaśa samā bhuktam rājyam vilapatas tava*, and the thirteen years of kingly enjoyment on the part of Duryodhana are contrasted with the weeping of his foes (161. 8 and 28 repeat this in the herald's words).

The exact time of the battle is given as to occur on the seventh day from the interview in v. 142. 17, at the time of the new moon. In Mr. Aiyer's little book, *The Chronology of Ancient India*, the statement in v. 83. 7, that Kṛṣṇa set out on his mission "in Kārtika, under the star Revatī, at the end of autumn," is united with this, which in turn is interpreted to mean that the new moon will happen in Jyesthā Nakṣatra (in seven days, emended by Mr. Aiyer to "ten"). It was, however, under Puṣya Nakṣatra that the Kuru army took the field, v. 150. 3, *puṣyo 'dya*, as did the Pandus, ix. 35. 10 and 15, and the armies were prepared, according to vi. 17. 2, *maghā-viṣayugāḥ somāḥ* under Maghā. The asterism should be Citrā (v. 143. 10; vi. 3. 12, 28, etc.). Eighteen days of battle are recognized, save in the interpolation of Balarāma, whose journey can be interpreted only to mean that the battle lasted forty-two days (below).

During the battle, the only point to be noticed is the age of the combatants, the leaders Duryodhana and Yudhiṣṭhira being now over forty or fifty (as above). Arjuna, two years younger, is *taruṇa* and *yuvan*, Nakula is *sukumāro yuvā śūrah*, but Droṇa is eighty-five; vii. 12. 22; 83. 23; 110. 81; 125. 73; 126. 39. Despite these epithets applied to the Pandus, which imply middle-age strength or even youthful delicacy, in vii. 196. 44, Arjuna says that the short remnant of their days will be affected by Droṇa's unrighteous death, *yadā gataṁ vayo bhūyaḥ śiṣṭam alpataṛaṁ ca naḥ*, "gone is the greater part of life, it is the lesser part remains to us," though *vayaḥ* (cf. *pravaṣyaḥ*) may imply strength of life more than life (yet the conclusion does not favor this, *tasye 'dānīm vikāro 'yam adharmo 'yam kṛto mahān*). Karna also is *yuvan*, viii. 8. 11. This is not middle-age, however, according to the antithesis of *yāuvana*, *madhya*, *vṛddha*, or *yāuvana*, *madhya*, *jarā* (see the citations, in the last article of the series in this Journal), nor can it be interpreted as fool's age as in x. 3. 11, for it is intended, as in the citations above, for a compliment. The time-term for fool is *bāla*, as in xi. 17. 20, applied to Duryodhana.

After the battle comes the inconsistency of Balarāma's expedition. He started out just before the battle and returned at its close, making forty-two days in all, from Puṣya to Śravaṇa, *catvāriṃśat ahāny adya dve ca*, etc., ix. 34. 6; 54. 12.

It is quite impossible to reconcile this with the statements in regard to the length of the battle (eighteen days) found elsewhere in the epic. In ix. 35. 14, Balarāma starts under Māitra Nakṣatra, i. e. Anurādhā. Mr. Aiyer, *op. cit.* p. 101, emends by changing 42 to 24, *catvāriṃśat* to *catvāriṃśaty*, and *Śravaṇe* to *Rohiṇyām*; but this is merely a confession of inability to reconcile the conflicting statements except by changing the text completely. At the same place, Mr. Aiyer endeavors to reconcile the appearance of the moon in the night battle in vii. 185 f. on the fourteenth day, with the previous account of the new moon. Mr. Aiyer's conclusion that the war ended on the 51st day before the winter solstice, and began on Oct. 14th, 1194 B.C. (or that at least the war took place in the latter half of this year), does not depend altogether on the rectification of these obvious errors, but is based to some extent on the interpretation of the doubtful verse xiii. 168. 28 (27, "for 58 nights Bhīṣma lies on his couch"), as already explained.

In xi. 17. 21, "he who has enjoyed undisputed royalty for 13 years now lies dead," the fourteenth year implied in the early account is pointedly ignored, as it is elsewhere, notably in viii. 68. 9, "there are now these 13 years in which we have lived in the hope of Arjuna," and the battle takes place immediately on the end of the 13th year.

But as to the assumption that the Pandus were originally banished for only twelve years and that the thirteenth year is a later addition, it must be proved by the content, style, and metrical form of Virāṭa rather than by the discrepancies in the texts that refer to the years of banishment. I used to think that the thirteenth year was interpolated on the further ground that such discrepancies revealed a prior stage in which the thirteenth year was actually unrecognized, as in iii. 24. 2; v. 72. 9; but a careful survey of all the cases now leads me to the conclusion that this may be due merely to the poetic point of view. An example as good as any other is found in vii. 137. 47, in which a reference is made to the fire of rage lasting 13 years, and 197. 7, "the impatience of 13 years," as compared with ib. 145. 93, where "the sorrow of 12 years" is mentioned.

In one case the anger during the whole period, in the other the wretchedness during the life in the wood, is emphasized. So in viii. 9. 58, it is said that Yudhiṣṭhira did not sleep for thirteen years because of his fear of Karna, a statement repeated in different words in 66. 15 and again in xi. 21. 7, and this is presented, in viii. 74. 47, as the grief acquired in thirteen years, *duḥkhaṁ trayodaśasamājitam*, whereas in viii. 11. 27 mention is made of the grief (arrow) of twelve years, *śalyo manu dvādaśavārṣikaḥ*. Other references in this book are found in viii. 91. 4, in which an extra year is recognized besides twelve in the wood, and 96. 45, "we shall sleep well to-day after being awake in sorrow for 13 years." The next book too recognizes only 13 years. In ix. 33. 4, which is repeated in 58. 19 with var. lec., this section repeating the substance of 33 after the Tīrtha episode, a long interpolation (ch. 33-51), it is said that Duryodhana has been practicing on an iron statue of Bhīma for 13 years (this iron statue reappears in xi. 12. 15 f.). Also in xv. 4. 15 the thirteenth year is recognized. In the earlier books, the thirteenth year is recognized, besides passages already cited, in ii. 46. 11; 74. 18 f. -76; 77. 30; 80. 34; iii. 3. 74; 8. 3; 46. 58; 49. 11; 51. 33 f.; 176. 10 f.; 252. 43; 256. 14; 261. 50; v. 61. 19; 95. 41; 160. 89; all referring either to the thirteenth year as being completed, or, what amounts to the same thing, to what will happen in the fourteenth year, after the thirteenth, e. g. ii. 77. 30 and iii. 261. 50. I think now, therefore, that the thirteenth year must be regarded as belonging to the original conception of the present poem and that the late characteristics of Virāṭa are due to subsequent working-over of the delectable scenes embodied in it. Possibly the original form was simply an extra year "in concealment" (incognito). The time-discrepancy is of no more weight than in the application of thirteen years to the wood-life exclusively. This curious statement, that the Pāṇḍavas lived not only in banishment but in the wood for 13 years, is found three times, once as cited above, p. 50 ad fin., again in vii. 197. 10,

*vanam pravrajitāś ca sma valkalājīnavāsasāḥ
anarhamānās tam bhāvam trayodaśasamāḥ parāṇi,*

"we were exiled by our enemies to the woods, clothed in bark and skins, undeserving of that condition, for thirteen years;" and in xv. 11. 23,

yatra trayodaśasamū vane vanyena jīvatha,

(that condition) "when for thirteen years you lived in the wood on forest products." But as the latter is easily explained as a phrase (also in the Rāmāyaṇa, see my list of parallels, *Great Epic*, p. 433, No. 242), and is preceded by an explicit reference to the "secret residence" in contrast to the "twelve years hate," ib. 20, so in the former case, "that condition" carries the thought over to the end of the period during which the Pandus were treated badly for thirteen years. So also the fourteenth year in the wood, logically to be extracted from the narrative as sketched above, is probably merely a poetic lapsus. Abhimanyu is killed at 16 years of age, after having been married for six months, i. 67. 117, etc.; xi. 20. 29.

In the tenth and eleventh books the data carry us forward to the end of the Pandus. Kṛṣṇa is slain on the 36th year after the war; xi. 25. 44, repeated in xvi. 1. 1. During this time the Pandus defer to Dhṛtarāṣṭra for 15 years, and the latter, xv. 20. 32, lives three years more. It is 16 years after the war in xv. 29. 37, at which time Drāupadī is "just about touching middle age" (!), xv. 25. 9. Two years more pass, xv. 37. 1, after more than a month's visit on Dhṛtarāṣṭra, *māsah samādhi-kaḥ*, xv. 36. 11. Three of the eighteen years after the war were passed by the old king in the wood and fifteen in town, xv. 39. 25. These form explicit denials of the fact (inferred from the circumstance that Parikṣit was a baby at the time of the visit) that Parikṣit was crowned about sixteen years after the war, as shown by Mr. Aiyer. The epic in this regard contradicts itself and can scarcely be taken as a safe guide for its own date as far as these data are concerned, x. 16. 7; xv. 15. 10; 25. 10. Parikṣit reigns 60 years, according to x. 16. 15, though in a final extravagance the epic declares that Yudhiṣṭhira's reign alone embraces "thousands of years," xv. 10. 22,

*tathā varṣasahasrāṇi kuntiputreṇa dhīmātā
pūtyamānā dhṛtimātā sukhaṇi vindāmahe nṛpa.*

Altogether the epic is as fairly consistent in its dates as was to be expected of so huge a compilation. Some of the inconsistencies, however, are so decided as to admit of no reasonable doubt that the poem has been largely interpolated.

SYNTACTICAL NOTE ON THE ABLATIVE OF TIME.

It is not worth while to make a separate article out of this note, so I append it here, though scarcely in place. In the *Am. Journal of Philology*, xxiv, p. 1 f., I have tried to show that, in epic and earlier Sanskrit, the ablative of time-words does not mean "after" but "up to" or "within" the time named, my general conclusion in respect of all the grammatical cases being that in early Sanskrit no grammatical case expresses temporal posteriority any more than it does temporal priority, though "time after" may be implied by any case (except the vocative), even by the nominative and accusative. The ablative in particular approximates to a true indication of posteriority, yet only in serial time, measured *from* a starting-point. This note illustrates the use of the ablative in the later literature of the *Bṛhat Saṃhitā*. Here is strikingly shown how such an expression as *ṣaṇmāsāt* regularly includes the period and does not mean "after a semester," but within it. Good examples are found in xxx, xxxii, and xlii. In xxx. 12 and 31, *saptāhāt* is "within a week;" in xxxii, "in four fortnights," and "in a week" are expressed by the instrumental and by *saptāhāt* respectively; in xlii. 7, it is said that a rise in price will take place *śaṣṭhe māsi*, *varṣārdhāt*, and (*sthitvā*) *māsam*, all alike giving the limit. So in xlvi. 14, 30, 39, 53, 'time within which' is expressed by instrumental and ablative, *ṣaṇmāsāt*, and so elsewhere. But in this later literature, BS. lxxviii. 20, appears (as noticed in my article) an innovation in *tryahāt saṃnivartate*, in the apparent meaning "ceases after three days." BS. has *ā mūrdhataḥ* in the sense "from the head onward," lii. 10, as well as *ā varṣāt*, "within a year," xlv. 16 (also the *antam* construction, *ābrahmakṛtāntam*, lxxiv. 20). The nominative of duration, as illustrated in the article referred to above, has here a still more striking illustration: (*yo* 'dyāt), *sāi* 'kāni *viṃśatir* (the reading of all MSS.; see Kern's note) *ahāni*, lxxvi. 3: (whoso eats), "days a twenty (nom.!) and one."

Śivarāma's Commentary on the Vāsavadattā.—By Dr. LOUIS
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IN any attempt to interpret Sanskrit *kāvya*, native commentaries are not only important, but almost indispensable. The question as to the accuracy of their information is, generally speaking, comparatively easy to decide. Their authors understand in the majority of cases the texts which they explain; they are acquainted with all the stylistic tricks which adorn the *kāvya*, and their interpretations may usually be accepted. Of the many Hindu glossators of value not the least important is Śivarāma Tripāṭhin, with whose *Kaṇcanūdarpaṇa* on the *Vāsavadattā* of Subandhu this paper is concerned. In the preparation of my projected translation of the *Vāsavadattā* I have naturally studied the *Darpaṇa*, the only commentary accessible in printed form (in the editions of the *Vāsavadattā* by Hall, Calcutta, 1859, and by Vidyasagara, ib., 1874).

Commentaries on the *Vāsavadattā* are, however, numerous. Hall, in his edition of the novel (Introd., 45-47), mentions Narasiṃhasena and the *Tattvādīpinī* of Jagaddhara. In his judgment, neither of these is equal to Śivarāma. He thus characterizes Jagaddhara: "Jagaddhara, as compared with Śivarāma, though he oftener takes note of various readings, is more diffuse, is equally fanciful, and resorts less frequently to authority in justification of his comments. His errors are freely exposed by his successor [Śivarāma], and not invariably with unexceptional courtesy." He says of Narasiṃhasena's gloss that it "is of small value, and is busied very much more with pointing out the figures of rhetoric which Subandhu exemplifies, than with anything else." To this list of commentaries Aufrecht (*Catalogus Catalogorum*, i., 566, ii., 133-134, 224) adds the following: the *Sarvaṃkaṣa* of Nārāyaṇa Dikṣita, the

¹ I have not found any mention of Jagaddhara in the *Darpaṇa*. These exposures of his blunders must therefore be by implication. See, however, Aufrecht, *Catalogus Catalogorum*, i., 195.

Cārṇikā of Prabhākara, the *Tattvākāumudī* of Rāmadeva, the *Vyākhyāyika* of Vikramarddhi Kavi, glosses by Śrīgāragupta, Sarvacandra, Timmaya Sūri, Sarvaraṣita, Siddhacandragañi, and Sūkṣmadarśin, and either one or two anonymous commentaries. Of these glossators, Timmaya Sūri lived about the beginning of the sixteenth century, if he was identical with the author of a commentary on Agastya's *Bālābhārata* (Aufrecht, i., 231), and Prabhākara was born in 1564 (ib., i. 353).

According to Hall (Introd., 44), Śivarāma composed besides the *Kuñcanadurpana* the *Bhūṣaṇa*, a commentary on Daṇḍin's *Daśakumāracarita* (printed in Godebole and Parab's edition of this novel, Bombay, 1898, 218-244), the *Lakṣmīnivāsābhīdhāna*, a collection of *uṇādi* derivatives (edited in the *Ṣaṭkoṣa-saṃgraha*, Benares, 1874; see also Zachariae, *Indische Wörterbücher*, (Kośa), 38, Aufrecht, i., 539), and the *Rasaratnahāra*, a treatise in 102 couplets, with his own commentary, entitled *Lakṣmīvihāra*, on poetic sentiments. To this list Aufrecht, i., 652, ii., 155, adds eighteen, including both commentaries and original works. The commentaries, in addition to those on the *Vāsavadattā* and the *Daśakumāracarita*, were on the *Kādambarī* of Bāṇa, on the *Fināyakamāhātmya* (Aufrecht, i., 577), the *Vṛttakāustubha*,¹ and the *Viśamapadī* on the *Kāvya-prakāśa*. His original works, besides the *Rasaratnahāra*, are the *Alaṅkārasamudgaka*, the *Kāvyalakṣmīprakāśa*, the *Nakṣatramālā* with his own commentary, entitled *Lakṣmīvilāsa*, "a grammatical poem. Printed in Kāvya-mālā, 1888" (Aufrecht, i., 274), the *Nṛpavilāsa*, "written for his brother, Keśavarāma" (ib., ii., 65), the *Bhūpālābhūṣaṇa*, "quoted in the Lakṣmīnivāsābhīdhāna" (ib., i., 415), the *Rahasyacandrikā*, the *Rāvanapuravādha*, in which a number of Śivarāma's other works are mentioned (ib., ii., 155), the *Vidyāvilāsa*, mentioned in the *Lakṣmīnivāsābhīdhāna* (ib., i., 575), the *Sūryādīvarṣa-phalokti*, and five *stotras* in honor of Kṛṣṇa, the Ganges and the Jumna, Ganeśa, Śiva and Bhāirava, and Śiva and Rāma. His main creative interests therefore lay apparently in *kāvya*-poetry and in grammar, while as a commentator he seems to have devoted himself especially to *kāvya*-prose and to rhetoric.

¹ This seems not to have been found. At least, Aufrecht does not mention it.

Of his life Śivarāma tells little. In his preface to the *Kaṇ-
canadarpaṇa*, after an opening invocation to Śiva, he thus
speaks of his ancestry (Hall, 1, ll. 11-18, omitted by Vidyasa-
gara):

*trilokacandra ity āsīt khyāto lokesu candrabat
tanayo vinayopeto yavīyān asya dāivavit
kṛṣṇarāmābhidaḥ sūriś caturbhis tanayāir yutaḥ
rājate rājanūtījñāḥ sāmādyāir iva bhūpatiḥ
yah pāthakānām kṛpayā 'ptavīdyaḥ
sa kārṣṇarāmīḥ śivarāmanāmā
govindarāmo 'tha mukundarāmo
jātaḥ kramāt keśavarāmanāmā,*

'one Trilokacandra there was, famed among the worlds as is the
moon. His younger son, with virtue filled, an astrologer,
named Kṛṣṇarāma, a sage with four sons, knowing kingly con-
duct, shineth even as a lord of earth through conciliation and
the rest.' The son of Kṛṣṇarāma, who gained knowledge by
his teachers' compassion, was Śivarāma; then Govindarāma,
Mukundarāma, and Keśavarāma, in order born.' The *Bhāṣaṇa*
gives no additional information, except that Trilokacandra was
a Śivite Brahman (ll. 5-6):

*māheśapādāmbujasaktacetū nareśasampṛjītapādapadmāḥ
graheśatejū virajā mahājās trilokacandro 'jani sa dvijāgryaḥ,*

'with his thought devoted to the lotus-feet of the great lord
[Śiva], honoring the lotus-feet of the lord of men [the king],
with the glory of the lord of planets [the sun], brilliant, great
in strength, Trilokacandra was born, foremost of twice-born.'

If we know little of Śivarāma's life, we can at least fix his
date within narrow limits. In *Lakṣmīvilāsa* 9, he cites the
Paribhāṣenduśekhara, which places him about the beginning of
the eighteenth century (Aufrecht, i., 652), for Nāgojī or
Nāgeśabhaṭṭa, the author of this grammar, "was the Guru of
Gaṅgārāma, the great-grandfather of Maṇirāma (1804)"
(ib., 283).

¹ Alluding to the four means of royal conquest. Cf. Manu, vii. 107:
tān ānayed vaśaṁ sarvān sāmādibhir upakramāḥ.

In his commentary Śivarāma quotes fifty-six authorities. By far the greater number of references is naturally lexicographical. In glossing the vocabulary of an author as artificial as Subandhu, bristling with *śleṣas*, *virodhas*, and all other adornments of *kāvya*, constant citations must be made from the lexicographers to support the meanings assigned by the commentator to the words which he discusses. On lexicography, grammar, meter, drama, and rhetoric thirty-three works and authors are quoted in the *Kaṇṇanūḍḍarpaṇa*. Amara, the most important of all the lexicographers (cf. Zachariae, 18-20), is by all odds the most frequently cited authority, being quoted six hundred times.¹ Next comes the *Viśvaparakāśa* of Maheśvara Kavi (ib., 28-29), with 165 citations. Hemacandra (ib., 30-35) is quoted but thirty-four times; the *Hārāvalī* of Puruṣottamadeva (ib., 23-24), twenty-eight times; and the *Dharaṇīkośa* of Dharaṇidāsa (ib., 20), twenty-three times. Medinīkara's *Medinīkośa* (ib., 35-36) is cited eleven times, and an *Ekākṣara-kośa*, probably that by Puruṣottamadeva (ib., 37-38, Aufrecht, i., 74, 342), ten times. The *Utpalīnī* of Utpala, apparently one of the older lexicographers (Zachariae, 7), is cited eight times; the *Anekārthasamuccaya* of Śāśvata (ib., 4-5, 24), seven times; and the *Uttaratuntra*, "probably a part of a dictionary" (Aufrecht, i., 63), six times. As no manuscript of this *kośa* seems to be known, and as Śivarāma is the only author recorded by Aufrecht as quoting it, the fragments found in the *Darpaṇa* are of interest. They are the following:

- p. 72 (quoted on p. 242-243 as from the *Hārāvalī*):
makṣikā matsārā jñeyā bhramarāṭī ca sā matā;
- p. 73: *viśvakarmā devaśilpī viśvakarmā divākaraḥ;*
- p. 129: *rasajñā rasanā jihvā;*
- p. 142: *nandir ānandaḥ jāmātrīmitrayor api ce 'syate;*
- p. 184: *ākhyāyikā pariccheda āśvāsocchvāsakāv api;*
- p. 242: *coraḥ śaṅkitavarṇas ca kusumākṣaḥ prakīrtitaḥ.*

Another lexicographer, of whom no manuscript is yet discovered, but who is quoted by Śivarāma (and by a number of other glossators), is Rantideva (cf. Aufrecht, i., 492, Zachariae, 6), who is cited five times. Four quotations each are made from

¹ Counting such references as *iti caturṣv amaraḥ*, p. 281, as four times, and so in all similar cases.

the *Anekārthadhvanimañjarī* of Mahākṣapaṇaka (Zachariae, 25), the *Vaijayantī* of Yādavaprakāśa (ib., 27), the *Ratnakōśa* (ib., 15, Aufrecht, i., 489), and the *Rudrakōśa* (Aufrecht, i., 528). Two citations each are made from Maheśvara's *Śabdabhedaparakāśa* (Zachariae, 24), Rabhasapāla (ib., 6, Aufrecht, i., 492-493), and Vyāḍi, one of the most ancient of all the lexicographers (Zachariae, 6-7, Aufrecht, i., 618). Only one quotation is found from the *Kōśasāra* (Aufrecht, i., 130; cf. Hall, Introd., 45). This is the unique citation thus far known from this work, and runs thus (p. 153):

arthe kṛte 'vyayam tāvāt tādārthye vartate dvayam.

One citation each is made also from Puruṣottama's *Ūṣmabheda* (Aufrecht, i., 71), the *Śabdūratnākara* of Mahīpa, written in 1374 (ib., i., 444, Zachariae, 36; cf. Hall, Introd., 45), the *Kavikalpadrūpa* of Vopadeva, a *dhātupāṭha* of the thirteenth century (Aufrecht, i., 86, 616), and the *Śakārabheda* (ib., i., 622).

In grammar but one author, *Kṣīrasvāmin*, who lived probably in the eleventh century (Zachariae, 21), is quoted, his *Nipātanyayopasarga* (Aufrecht, i., 134, 296) being once cited. In *alanikāra* literature six authors and works are quoted. The most numerous citations are from Śivarāma's own *Rasaratna-hāra*, from which he makes five quotations. Four citations each are made from Mammāṭa's *Kāvyaaprakāśa* (Jacob, JRAS., 1897, 308-309) and from the *Vaughattālanikāra* (ib., i., 559, Regnaud, *Rhétorique sanscrite*, 380, Jacob, 281-309). There are two quotations from Daṇḍin's *Kāvyaḍarśa*, and one each from the *Alanikāraśvara* and the *Kaṇṭhābharana* (probably the *Sarasvatikaṇṭhābharana*, [Aufrecht, i., 699, 78, Jacob, 299-306], hardly the *Nyāyalilāvatikaṇṭhābharana*, a commentary on the *Nyāyalilāvatī* [Aufrecht, i., 310]). Of the former work, the citation by Śivarāma, p. 4, defining the *sudharmitā-guṇa*, *yatra viśeṣanadvārā viśeṣyalābhaḥ sū sudharmitā*, is the only fragment known (ib., i., 32).¹

Kedarabhaṭṭa, the author of the *Vṛttaratnākara*, is once cited as an authority on meter, and Vāmana, a writer on poetics

¹ Hall (Introd., 45) says that the *Alanikāraśekhara* (Aufrecht, i., 32) and Bhānudatta (ib., 405, Regnaud, 370-372) are quoted by Śivarāma. I have not found the citations.

(ib., i., 563, Jacob, 288-289), is quoted twice. From Bharata there are eight citations.

To explain the astronomical allusions, which are found in the *Vāsavadattā*, two quotations are made by Śivarāma from Varāhamihira (Thibaut, *Astronomie, Astrologie, and Mathematik*, 56-57, 65-66), and one each from Garga (ib., 28-29, 66) and the *Jyotiṣa* (ib., 28-29). If we may judge from the single fragment preserved from Udayaśaṅkhara Pāṭhaka, *kārtika-suddhadasanīm ārabhya māghasuddhastamīparyantīm*, and cited by Śivarāma, p. 298 (Aufrecht, i., 65, Hall, *Introd.*, 45), he also seems to have written on astronomy. There are two references to Vasantarāja's *Śakunārṇava* (Aufrecht, i., 556, Hall, *Introd.*, 45), a work on omens, but, somewhat curiously, there seems to be but one citation from a philosophical author, Prabhākara Guru (Aufrecht, i., 155, 353).¹

Of literary works and authors, sixteen are quoted. The most frequently cited is Kālidāsa, from whom twelve quotations are given (pp. 24 [twice], 26, 27, 30, 48, 66, 141 [twice], 151, 152, 153). Māgha is cited five times (pp. 51, 58, 78, 174, 175), the *Mahābhārata* twice (pp. 34, 273), and the *Harivaṃśa* once (p. 273.) Two citations each are given from Bhojarāja (pp. 53, 185), Manu (pp. 16, 23), and the *Rāmāyaṇa* (pp. 85, 149). Eight works and authors are mentioned once each. The *Kāmatantra*, which, though an erotic work, seems not to occur in Schmidt's catalogue in his *Beiträge zur indischen Erotik*, is known apparently only from a few citations (cf. Aufrecht, i., 92.) The one given by Śivarāma (p. 283) is as follows:

*cīrotpannapravāsaṇa prītir gacchet parābhavam
rūgāyatanaśaśmāri yadā na syān nakhakṣatam.*

Trivikramabhaṭṭa, the author of the *Damayantīkathā* (Hall, *Introd.*, 45) (p. 27), Nārada (probably the *Nārada-purāṇa*) (p. 49), Bhartṛhari (p. 154, also once anonymously), Bhavabhūti (p. 259), Bhāravi (p. 69), Harṣadeva (p. 154, also once anonymously), and the *Hitopadeśa* (p. 272, also once anonymously) likewise are each quoted once. The *Lohaśāstra*, which is known, apparently, only from the single passage quoted from it by Śivarāma (p. 198; see Aufrecht, i., 546), was probably a scientific work. The *śloka* in question is as follows:

¹ It is possible, though not probable, that the Prabhākara here mentioned is the commentator on the *Vāsavadattā* mentioned above, p. 58.

*cumbako drāvakaś cāi 'vā 'kaṛṣako bhrāmakas tathā
ekadvitricatuhpañcaṣaṇmukhāḥ sambhavanti te,*

'the magnet and the touchstone, the lodestone, and the pole-stone have one, two, three, four, five, or six faces.'

It is noteworthy that there is but one citation from Bāṇa (p. 9), which is the eleventh stanza of the poem introducing the *Harṣacarita*.

Hall (Introd., 45) correctly remarks that "Śivarāma, to a most unusual extent for a scholiast in Sanskrit, has recourse to the living language of the country, in explication of terms found in his original. His preference is, of course, for his mother-tongue, the Hindī: but, in a good number of instances, he also introduces words from the Marahṭṭī and the Gujarātī." These words, denoted in the commentary by *iti bhāṣāyām*, or less frequently, by *iti khyātāḥ* (*loke*), number fifty-two.

In the *Kaṇcanadarpaṇa*, sixty-nine anonymous quotations are made. The majority of these are of little importance, either as literature or as sources of information regarding Śivarāma. A number of them may easily be identified. Thus, several examples of rhetorical figures, as those on pp. 5, 6, 80, are taken from the *Kāvyaprakāśa*; on p. 24 there is an anonymous citation from Bhartṛhari; on p. 33, one from the *Prasanna-rāghava*; on p. 145, one from the *Ratnāvalī*; and on p. 272, one from the *Hitopadeśa*. A number of metrical examples, as the *āryā* on p. 2, 164, and the *upajāti* (*upendranāgārā*) on p. 10, are taken from the *Vṛttaratnākara*, and several specimens of poetic figures, as the definitions of the *sāttvikās* (p. 226) are cited from the *Sāhityadarpaṇa*.

In forming an estimate of the *Kaṇcanadarpaṇa* of Śivarāma, it may be said that the commentary is in general accurate and reliable. His appreciation of the *Vāsavadattā* was keen, and his explanations of the puns, allusions, and all the artificialities of Subandhu's work, are in the main correct. It is safe to affirm that without the *Darpaṇa* or some other good commentary the *Vāsavadattā* would be almost unintelligible to the Occidental reader. The cases in which Śivarāma is mistaken are so few as to be practically negligible. It is perhaps no exaggerated praise to say that he has written in his *Kaṇcanadarpaṇa* a model Sanskrit commentary.

The Pahlavi Text of Yasna ix. 49-103 for the first time critically translated.—By REV. LAWRENCE H. MILLS, D.D., Professor in the University of Oxford.

The Attributes of Hōm (i. e. of Haoma).

Good is Hōm, who is the well-giving one,² [that is to say, thou hast given with propriety], who art the just giver,³ [that is to say, Thou givest a thing to that one to whom it is quite appropriate (or encumbent upon thee) to give it].

50. The giver of good (thou art, the giver of a benefit); [that is to say, thou wilt give the thing which is a benefit (lit. which is good)];⁴ (thou) who (art) the healer, [that is to say, thou dost thoroughly heal a thing (making it healthy)].

51. The well-bodied one thou art, [that is to say, with thee the body is handsome (lit. 'good')]. Well-intentioned⁵ (or 'well-desiring') thou art, [that is to say, by thee that is desired which is proper.]

52. The victorious, the yellow-hued (thou art), the tender-sprouted, [that is to say, thy sprout is soft].

¹ The texts from which these translations are made appeared as edited with the collation of all the MSS. and with their variants in the twenty-third vol. of the Journal of the American Oriental Society, first half, July 1902. The square brackets enclose the glosses; the curved marks () my explanations. [The transliteration has been brought nearer to the standard published in this Journal, vol. xxi, second half, p. 191.—Ed.]

² So I render, to bring the statements into line; but it is possible that the writer meant to say 'the well endowed', 'thou art endowed with propriety.'

³ Notice that the original here is arš-dātō, and not arš-dātō.

⁴ This repetition is not so fatuous as it looks; the word meaning 'good' is repeated in its Semitic form.

⁵ According to the gloss, dehāk when understood as active, whereas we might be inclined to regard it as passive.

⁶ Here the trlr. repeats his former blunder, losing sight of the radical š or ž. He refers huvareš (huvareš) to var = 'to choose'. Hence his hū-kāmak'.

53. When they drink thee thou givest an excellent thing (or 'the best thing')¹ for the soul; thou art most an accumulator of portions; [that is to say; it is necessary or possible to make the store² for the soul good through thee, for a share in heaven is through thee].

Appeals for knowledge, energy, etc.

54. Tell³ on thine inspiration, O yellow one, [tell me a thing which (is attended and) attained with knowledge. Let learned wisdom be mine].

55. (Tell me) fully (of) power and fully of victory [let it be also mine].

56. (Tell me) fully (of) health and healing.

57. (Tell me) fully of progress and of the giving of prosperity.⁴

58. (Tell me) fully of strength of the entire body and of wisdom which is all-adorned, [it is as when one understands the

¹ Possibly 'a heavenly thing' was meant. It is perhaps worth while to point out in passing such an error as the accusative *pahrūmīh* for the nom. *vahištō*; notice that a form of *vaxš* is not used, as elsewhere, to explain *vahišta*.

² Was not *Garōdmānikīh* suggested by the external shape of the termination *-mainyōtemō* in *paθmainyōtēmō* (or *pāθm-*) which recalled *māinyū*, whose root is 'man' = 'to think', whereas the 'mān' of 'garōdmānikīh' is to be referred to an entirely different word, 'man' = 'to abide'. But notice our indebtedness to the Pahl. trlr. for a good rendering of *pāθm-* even when regarded as merely an alternative. Otherwise we might insist upon 'most path-finding for the soul'.

In regard to the meaning 'viaticum' as a 'provision for the soul on the way to heaven,' it does not suit the other occurrence of *paθmēng*; see Y. 46, 2.

No 'store of provisions' was made for the cattle on the way to any destination, nor do we hear of any store for the soul elsewhere as a wayside provision.

Hōm accumulated a 'store of enjoyment' for the soul here and hereafter; but food for the journey to the 'beyond' hardly.

³ Of course this shows a gross misestimate as to the grammatical form; see SBE. xxxi, pp. 235, 236. Notice that *Nēr.* follows the error. He would read a *mruvē* as an imperative, or else he read a *mrūiōi*, or a *mraoš*.

⁴ So according to *Nēr.*'s *puštīdātīm*, or 'of the giving of one's choice desire' to *var*; possibly 'the giving of outpouring', to *var* = 'to rain', might be meant. At all events the translation is really a blunder.

end of a thing; also knowledge (is) forever' his by means of this]. (That is to say, if he knows the end, he knows all.)

59. (Tell me) fully from that source how they go forth in the world having independent power (or, better, read *sātūnēnī* (or *-nānī*') with *Nēr.* and the orig.). '(Tell me) fully how I may go forth'), and let me (lit. 'may I') overcome hostility, and conquer² the *drūj* (i. e. demon of the foe).

60. Appeals for defence and victory.

(Tell me) fully how from these (resources) I may overcome³ all that hostility of the enemies (lit. the torment of the tormentors) which is from the demons and (from) [evil] men,

61. (from)⁴ the sorcerers and (evil) fairies (from)⁴ the tyrants and the Kayaks and (from) the Karpas, (the meaning of *Kayak va karp*) is [those (?) who are blind and deaf⁵ as to the matter of the Yazads],

(62) (from) the biped⁶ murderer (or 'miscreant') [even from the biped *aharmōk* (the persecuting-heretic)], and also (from) the quadruped the wolf,⁷

(63) (from) the wide-fronted host also, [that is, theirs is many a murderer; some say this (that the meaning) is that 'their nostrils⁸ are wide'], who fly⁹ with craft.

¹ I should have preferred *hamāk* to *hamāi* with *Nēr.*, but not in view of the gl. with 'the end'; this points to 'ever.' Otherwise 'all' knowledge would be better as being nearer the original.

² *Sātūnd* is of course an error, but in view of the correct *tarvēnānī* = 'let me overcome' and *vānēnī* = 'let me conquer,' for so we must understand the falsely written *tarvēnānd* and *vānēnd*, we may also restore *sātūnd* to *sātūnēnd*, really first meant for *sātūnēnī*, or '-ānī.'

³ Cf. Y. 28, 7 for *tarvēnānī*.

⁴ Of course these forms should be understood as being in the gen. abl. like their original and their predecessors: see *Nēr.*

⁵ These ideas are erroneous traditional growths; see *Gāthas*, vol. iii, a, pp. 130, 131, on the article *Kavi* and *K*. The renderings 'blind' and 'deaf' are mere careless traditional deductions from the outward forms of the words.

⁶ Genitive abl. again with *Nēr.* So in 63, 'Biped' is of course but another word for 'human' here.

⁷ *Nēr.* curiously renders this as 'tiger.'

⁸ So perhaps, thinking of negroes. 'The wide-faced' would be indeed the more original, as the words are applied only figuratively to armies.

⁹ I can see no necessity for the meaning 'who fly'. 'Who path-along (sic) with stratagems' might express the idea. Certainly 'flying' in the sense of 'retreating' was not meant.

Boons asked of Hōm.

64. This first boon which I pray¹ from thee, O Hōm, who art from death afar, (is) that which (is) the best world of the saints which is bright, all-glorious.²

65. This second boon which I beseech³ of thee, O Hōm, who art from death afar, (is) the boon of constant bodily health (lit. 'the healthy continuance' of the body', 'the unbroken continuance of the body's health').

66. This third boon which I ask from thee, O Hōm, (thou) far from death, is the long living on (i. e. 'the vitality') of life.

67. This fourth boon I ask of thee, O Hōm, (thou) far from death, is how (meaning 'that') from (the condition of) a suppliant⁴ (that is to say, 'in accordance with my prayer') I may go forth both strong and successful upon the earth, and may overcome (still further) the hostility (lit. 'the hateful torment') and that I may conquer the drūj (demon of all harm).

68. This fifth boon which I pray of thee, O Hōm, the death-afar, is that I may go forth upon this earth as a victorious smiter in battle, that I may overcome hostility (lit. 'the hateful torment'), and that I may conquer the drūj (demon of deceitful harm).

69. This sixth boon I ask of thee, O Hōm, (thou) death-afar, (is) that I may see (the thief) before the thief (sees me), that I may see before the bludgeon murderer (sees me), that I may

¹ Zaidyam-ī, so reading with the MS. D. in the other occurrences = 'I would ask of thee'; but 'ī' is of use here to connect hōm... i dūrāōš.

² Perhaps it is better to read hamāk here with the MS.D., as hāmāī = 'ever' conveys rather too much meaning. Some might prefer 'all-happy' to 'all-glorious'.

³ The word, rōvešnīh (so, now) = 'continuance' is a sort of false gloss caused, as elsewhere, by the suffix -(t-)ātem (to drvatātem) which seems, as elsewhere, to have been suggested by a form from i, aē = 'to go'. See avaētās (= '-tāts') rendered anāk-rōvešnīh at Y. 31, 20 where the -aētās, rendering 'rōvešnīh,' was suggested by an aētās; cp. Ind. iti, itī, éta.

⁴ Lit. from 'a wisher'; but see Ner.'s better bahuvrīhi. I am now inclined to depart from this traditional rendering and to refer aššō, to iṣirā, etc.: 'that I may go forth 'fresh' and 'powerful'; cp. eṣā as against ēṣa.

see before the wolf; [the exhilaration (is) the remedy (that is, that I may procure thine exhilarating stimulus as a defensive remedy arousing my energies to be on my guard and my eyesight to be keen to trace the lurking figures)].

70. Let no one see 'before us (i.e. get first the sight of us); before all may' I see,² [I and my disciples].

The Gifts of Hōm.

71. Hōm gives to those who are swift, to those who would make their horses completely efficient, even to them, he imparts energy (that is speed) and strength that is endurance; [(this is for) the charioteers].

72. Hōm will give also to those bringing forth in birth³ a brilliant⁴ son, and a sacred⁵ offspring.

73. Hōm imparts to those who sit much at home (lit. 'housely'⁶ (sic) in the continued study of books, (that is to say, 'of the priestly lore and ritual') increased prosperity and learning.

74. Hōm grants to those who are maidens, and sit long unappropriated, [that is to say, who are not married] a master who is manifestly-true⁷ (or 'really their own'), [that is to say, he will

¹ So A (DJ.).

² Nēr. here supplies an *upāyah* = 'remedy' as above in 69 where it represents properly the Pahlavi *čarak*. This is of course an error in 70 where no *čarak*, nor *upāyah* is called for; but it occurs only in the gloss.

³ Nēr. and the Parsi-Pers. translate negatively. We should simply correct their erroneous short 'a priv'.

⁴ One would be inclined to adhere to this meaning for *xšaētō* here. The royal family might be held in view as typical.

⁵ We should avoid, so far as may be possible, attributing too profound a meaning to the word *aharūv*. The meaning really held in view in the general use of the word *aharūv* in such a connection as this would be not so much 'holy' or 'righteous' in our sense of the word, as 'thoroughly respectable,' in the orthodox community, 'of good repute and attentive to all religious duties,' morality being of course understood.

⁶ I do not accede to the Pahlavi rendering for *katayō*, which I refer to Indian *kati* = 'how many'. The Pahl. has *katik* which Nēr. understands to mean 'at home, *gṛhasthāḥ*'; see SBE. xxxi, p. 237. The Pahl. formation seems to refer to *kata*, which at times may mean 'house.'

⁷ I think the orig. *haithīm* should be here understood in one of the senses of 'sat', 'santam'; i. e. as meaning 'good'. Whether *āškarak* could be brought to express such an idea is difficult to say.

make a husband appear for them] also for [each of] them (he will provide) a husband; also for them he produces¹ quick and (is) one who is endowed with understanding,² [(the meaning) is, when (they are) presented to a man, upon the spot he is in action].

A Punishment.

75. Hōm deposed from the royal authority those who are of the keresā(n)ī³ party who had grown (that is to say, 'who had become extreme') in (ambitious) seeking for the sovereignty, [that is to say, they have (actually) ascended the throne (lit. mounted the sovereignty)];

76. that is, who say thus: 'Not on our account later, (i. e. in future) do the priests with their desire for continual reciting⁴ (possibly for 'over-reciting') walk in the province (go about the country); [they would treat us thus; it is from our action when they do not (thus) walk (so, literally, possibly meaning 'they render us, i. e. they make us to be thus,' 'it is out of (from?) our action (or 'sphere of active influence') even when they do not (i. e. even when they no longer) walk']; that is to

¹ The false text zerkhūnēt is well corrected by Nēr. (and Darmesteter does not follow the Pahl. here). Nēr. has *yāzayitāram = 'a beseecher'; The Pahl. trlr. was curiously thinking of jan = zan; but of course Nēr.'s acc. is incorrect for jaiḍyamnō; other grammatical relations also are misapprehended. For a critical free version, see SBE. xxxi, p. 237.

² 'Endowed with understanding' should refer to Haoma as in the nom. Quick goes with jaiḍyamnō and refers to Hōm.

³ When we have such a plain analagon as the Vedic kṛṣānu for our keresānīm, we should pause before we think of 'Alexander,' though this piece was doubtless not older than his time. We should also note that our Iranian keresānīm may be indeed a text corrupted from a keresānūm, as there are prominent Zend MSS. in which ī and ū (at least) are actually written alike. Nēr.'s deeply interesting report of the opinion contemporaneous to him should not be overlooked. It was that the Church, 'ecclesia' was alluded to in keresānīm and also its 'Christians.' See the edition of the texts.

⁴ 'Desire for reciting' is of course an egregious error for aivištiš vereiḍyē. Aivištiš never equalled avarhōsmūrešnīh, except as a free and strained rendering: and I still think that vereiḍyē belongs to vard (vered); cp. Sk. वृध. It may, however, possibly be an infin. to var = 'to choose,' in the sense of 'benevolent cherishing.' Nēr. errs with the Pahl. See SBE. xxxi, p. 239 for a critical free rendering.

say, 'they put us out of action, which inefficiency lasts even after their proselyting peregrinations have ceased.')]]

77. Such an one as these conquers heroism of every kind;—slaughters outright heroism¹ of every kind [before and behind].

Hail to Hōm.

78. 'Happy' thou, [that is to say, thy person has become (lit. has arrived good; or perhaps it was meant to say 'it is welcome')], O Hōm, who art an absolute-king (i. e. a desire-king, a king reigning according to desire) through thine own power, [that is to say, thine is power in that duty (or deed). What is necessary (or desired to thee), that it is possible to thee to have].

79. Happy thou who understandest thoroughly many a religious (lit. 'many a truthful') word [which is proper; for it is proper in accordance³ with the (religiously) true word: kana vača aršuxda (so)].

80. Happy thou, who wouldst not be conferring forth from (that is to say, 'aside (?) from') that which is the truthful

¹ Nēr. seems nearer with his vṛddham tālayati (sic). Or could the meaning of vṛddhi 'increase' and vardanām be considered appropriate for gūrdih? which we should naturally render 'heroism'? The Parsi-Pers. does not translate the word, and affords only the awkward transliteration gūrdī (sic). Possibly my text 'gūrdih' should be considered to be used in a particular sense. We must remember that 'the increaser' was in himself almost 'sacred,' and so 'heroic.' 'The institutor of prosperity' was naturally regarded as endowed with every virtue, and with valour as well. We may remember that Nēr. elsewhere rather curiously rendered fravāhar=fravaši by vṛddhi. But may not the sign for 'g' in our supposed gūrdih be really superfluous. We remember that a gvi-krūnīh was recognized at Y. 53, 8, it being an outcropping of an ancient velarisation. So here we may have a gvardih (with an original 'g' surviving) in place of a vardih. As to the objection that this would be the out-cropping of a form too ancient to be possible, we could rejoice that a 'gvi' for vi=vi='apart' would be quite as ancient, and as difficult.

² Or possibly in the sense: 'thou hast appeared beatified.'

³ Rāi must be read with Nēr.'s yena for the senseless lā. which came from the misunderstood 'na' of 'kana' (so to be restored). Whatever the Pahl. trlr. may have understood by these words, I should restore them as above, and explain them as referring, perhaps indirectly and through some other passage, to Vend. xix, 28-35. The first particulars there mentioned refer to 'the word' which was to smite and destroy the creatures of Angra Mainyu.

speaking of conference,¹ [that is to say, thou mayst (or 'dost') not say a thing which Aūharmazd did not say² in the conference].

The Girdle.

81. For he who (is) Aūharmazd bore to thee the ancient girdle (so, but the word is merely transliterated) the star bespangled, the spirit-made (made by the spirits), the good law of the Mazda-worshippers, [so his girdle is this; that is to say, as the kūstik is singly made with a man (when he is created, a kūstik for each born believer), the law also which is with, that is to say 'upon' him, is also thus 'singly made.' Also its 'singleness of make' is this, that so long as a man does not drink hōm in the (observance of) the Religion he will not become clear³ (lit. unstupified); the drinking of hōm is a ceremony (or 'duty') in the sacrifice].

82. With that art thou girded upon the highest (spot) upon the mountains, [when there thou hast grown, also this thy 'single-createdness' (sic) is thus] while, or since, thou art for the lengthy⁴ continuous progress,⁵ (that is to say, since thou dost concern the far future), [while (or 'until') thou art of the future body (that is to say, since (or 'until') thou dost concern the interests of the future state) in the manthra, [that is to say, they (will) continually until the future state (is reached) pre-scribe thee in the ceremony of the Yasna].

¹ Or, reading hampūrsakihā : 'Happy thou, whose is not (a question) apart from the conference (whose are on the contrary) truthfully spoken communication and conferences.'

² Referring especially to the questions in Y. 44, and also to those in the Vendīdād.

³ This is the single effect of it, that it clarifies the intellect by stimulating it.

⁴ drāj = 'to maintain' may really be etymologically related to drājah = dirāz; but the Pahlavi translation of drājahhē as dirāz is, I think, erroneous. It means 'for the maintaining of,' hardly for 'the long drawn out recital of.'

⁵ So the Pahl. madam sātūnešnīh is not correct for aivi-δāitīšca; madam is not amiss for aivi, but the δ of δāitīš seems to be separated from the -āitīš-, which latter was again thought to be associated with 'itī,' or itī from i, aē = 'to go,' which is sufficiently ridiculous.

Still further prayers to Hōm.

83. O Hōm, who art house-chief and village-chief and tribe-chief and province-chief, [that is to say, thine is universal pre-dominance as to 'religious' matters (lit. spiritually all-lordship is thine)]; and thou art prosperity and a well-informed¹ lord, [that is to say, it is thoroughly possible to thee to impart (prosperity and information)].

Deprecations.

84. Power is thine and victory for this which is my body, whose (is) also complete prosperity which affords much enjoyment [through the afrīn',² that is to say, wealth (is thine) from which abundant happiness is derived].

85. Bear off from us that which is the torment of the tormentors,³ and bear⁴ off their intent which is severe upon the abode,⁵ [the kingdom, or 'their authority'].

86. He who in this dwelling, in this village, in this tribe, and in this province may be the enemy (lit. 'the hater') [the harmful sinner (the hostile heretic)],

(87) take away that which is the strength (or 'swiftness') of his feet,

¹ The stimulus of the fermented hōm was supposed 'to cheer one' as with a view of 'prosperity' and to awake the intellectual faculties so that they might acquire information.

² Mruvē seems to be only rendered, if at all, by pavan afrīn'; not so, however, Nēr. But he mistakes the form for a first singular imperative; notice that Nēr. treats pavan afrīn' as gloss, translating it āšīr-. For this reason I treat the pavan afrīn' as gl., regarding upa mruvē as not being translated by the Pahl. trlr. Patīxvīh as *rddhatvam seems rather lame for vrimāi; for the critical free version see SBE. xxxi, p. 288.

³ Again an allusion to the Gāthas; see Y. 28, 7.

⁴ Forms in -āīd are sometimes like those in -yēn used for the 2d sing. imperative.

⁵ 'Severe upon the abode' is of course almost a comic reproduction for garmantām, though 'girān' might be regarded as conveying the idea of its original. Probably we have a case of an additional translation here, the work of some later transcriber conveying the idea of an alternative. He first translated 'garm' as a denominative without sign, and then thought that mān='abode' might do for -mantām. Nēr. follows him.

(88) turn¹ off that which is his understanding;²

(89) render that which is his thought destroyed, [i. e. make it thoroughly inefficient to him];

90. Let him not be going forth upon his³ two feet: may he not be able (to work) with his two hands, [that is to say, may he not be able to do destructive-iniquity with his hands];

may he not be able (to work) with his two hands, [that is to say, may he not be able to do destructive iniquity with his hands];

¹ Here the trlr., Nēr. following, mistakes *verenūdi* for a form of *vart*: see SBE. xxxi, p. 238 for a critical free rendering: 'throw thou a veil of darkness,' 'a blinding wrapping;' lit. 'around his intellect wrap up.'

² 'Around his two ears wrap up' might be a better rendering of the original; as to this see *Gāthas* vol. iii a, dictionary, p. 101. *Manō* following in the next subsection might seem at first sight, and even later, to confirm the rendering of the Pahl. trlr. from the argument 'that the word 'mind' follows the word 'understanding'?' Some, however, might argue in the reverse direction, urging 'that a second term almost in the sense of *hūš* would be redundant and pointing out that 'wrapping up his two ears' was congruous to 'his two feet' in 90. *Manō* may however bear a more general, or universal, sense. I prefer on the whole the meaning 'understanding,' though the word may elsewhere describe 'the two ears of Ahura Mazda,' which is, though seemingly so quaint, not an impossible expression.

³ The trlr. could hardly help recognising the dual form here; so Nēr.; it is not a case for remark. Nēr. was troubled by the two words *fratūtuyāō* and *aivituyāō* meaning 'to have forward capacity (capacity to advance)' and 'to have circumstantial capacity (capacity about a thing).' He seems to have thought of *fra* while *yāō* suggested some form from *i. ae.* = 'to go.' At least so Nēr.'s *prapatayātūh* indicates. Is it however possible that Nēr. was wrong and that *patūk* here expresses possibility? Or does he intelligently omit one of the seemingly redundant forms. Notice that the trlrs. do not render the form in *-āō* as 2nd pers., but as 3rd. Too much importance should not, however, be attached to that. While I accede to the view that *fratūtuyāō* and *aivituyāō* are use for 3rd personals (see SBE. xxxi, p. 239), I am of the opinion that they are, together with their Vedic companions in *-ās*, in reality 2nd personals in form, a sudden reversion to that form taking place much as the 2nd person pl. in English may be used indefinitely; 'may you be able' for 'let one be able,' or 'may he be able.' Under the influence of this law the 3rd pls. opt. may be used as 2nd sing. imperatives: 'let them do . . .' = 'let one do . . .' = 'do you', in *-āñd* and *-yēn*. In this connection we may notice the sudden use of the 3rd pl. where the narrative concerns the singulars. as in 99, *vbedūnyēn*: 'they (such as he) would do it,' this in close connection with 'he thinks and says', meaning 'He thinks and says, and they, i. e. one (in his situation), would do it.'

(91) may he not see the earth with his two eyes ; may he not see the herd with his two eyes,

(92) he who may be hostile to that which is our purpose. [That is to say, until (or 'so that') he who is hostile may not be able to contrive against our proper interest (may he thus be deprived of sight)] (and also) against our body, [that is to say, with our body may he not be able to establish hostility (i. e. may he not make good his malice)].

Anathemas.

93. Against the (dragon) Aži, the green, the dreadful, whose poison has thoroughly reached¹ its aim, [whose poison has completely reached the body],

(94) when he may approach² the body, toward him who is the saint, O Hōm the yellow, for him also dost thou make evi-

¹ Viš - barā - āyāft should be regarded as a bahuvrīhi 'who is endowed with a hitting poison'. 'The poison affected' would not be so good. Barā-āyāft is of course an egregious blunder for the plain višō-vaēpahya (not -ahe) Nēr. however follows it as usual with his višāvēpte.

² So, reading -nāt. The Pahl. trlr. errs in referring nāsemnāi to the second 'nas' = 'to reach'. Some extreme traditionalists hesitate to follow him, whereas elsewhere they seem to be almost unvarying in their adhesion. One might be tempted to read yezrūnāt transitively: 'when he (the dragon) would drag his body against the saint.' But the 'motive' of yezrūnāt (so reading) is evidently 'nas' = 'to reach' as erroneously seen in nāsemnāi. In SBE. xxxi. I could only render 'to the saint who perishes', 'perishing as to his body,' or possibly better 'to the saint in the course of losing his body'. As to the rendering: 'for the saint destroying the body of the Aži,' if kehrpem refers to the body of the hostile person or being, i. e. the Aži in each case and not to that of the saint, then it is controlled by the preposition paiti with a jaidi anticipated and does not at all feel the influence of nāsemnāi which undoubtedly refers to the menaced saint. In that sense only can paiti refer to kehrpem, as it does undoubtedly to kamereḍem. Paiti looks awkward indeed as governing the genitive, and I feel that a kamereḍem understood is its real object. Aside from the clumsiness of the position of kehrpem, see 98 where kehrpem follows the kamereḍem of 97; and this separates kehrpem from the aži, as does also the metre, which shows that it; kehrpem, belongs to nāsemnāi ašaonē in the other sense throughout. That is to say, 'kehrpem nāsemnāi ašaonē' means 'to the body-perishing saint.' 'To the body-losing saint' might, as said, be a useful alternative. We should not hesitate to give a transitive and causative sense to 'nas' in the middle participle of the 'š' aorist 'losing his body', but 'perishing bodily' is also admissible. Against the meaning 'destroying the body of the serpent' we have also the general sense

dent¹ (thy) blow [that is to say, declare thoroughly a remedy for it].

95. Against the ruffian who works apart,² [that is to say, who works more apart than (or 'from')³ that which it is fitting to do (who evades the law)] the blood-wisher,⁴ [that is to say, they (such as he) would (like to) inflict wounds] do thou (as) a tormentor⁵ [speak on],

(96) who may (or 'when he may') approach the body, (i. e.) toward the saint, O Hōm, the golden, for him thou showest

of the place where the saint is on the defensive: see where the Aži is 'swallowing men', and 'swallowing horses.' The saint who smote the dragon was not one of the common faithful, but a signal hero, see above; and here also, it is Hōm to whom appeal is made as regards future dangers. See even 92, where *kerp' is actually stated to be 'our body.' This would seem to be decisive. The 'our' refers to the orthodox party of which the body-losing saint was but an individual though representative member. See also 95, where zazarānō, a nom. sg. masc., intervenes between the genitives and kehrpem; see 99, where kehrpem is separated from the ašemaōyahya (not -ahē) by eleven words; see 101, where, instead of the genitive, we have the dative, which makes a reference of the word 'body' to the hostile party still more improbable. See 'hē' intervening in 103.

¹ The rendering pētākēnih zanešn' for vadar(e) jaiōi conveys the idea well enough; but as zanešn' evidently renders jaiōi, pētākēnih must be meant for vadar(e), the 'motive' of which it is difficult to trace save in 'vad' = 'to speak' which would be a grossly erroneous explanation of vadar(e). Nēr. follows the Pahl. with prakāšaya. In the form pētākēnih we have a case of the 2nd sing. pres. used imperatively; see the gloss explaining the original.

² I follow this translation in dividing vīvarezdavatō, not pausing to consider a possible 'dav' in a vīvare-z-davatō.

³ Notice aē in this possible sense; 'from' after yūitar (or javīdar).

⁴ Here our additional MSS. give us a certain solution, bavīhūn. This text also illustrates a frequent error of the Pahl. trlr., who saw sometimes the form iś = bavīhūnastan even in sēvištō, not often, but sometimes, the trlr. being in such cases possibly a different person. The -iś- in xrvīšyatō was rendered bavīhūn. And yet these Pahlavi translations of the later Avesta are supposed to be closer to the original than those of the Gāthas. Both sets of Pahlavi translations, those upon the Gāthas and those here, gave us indeed our first ideas and are of indispensable value; but it is folly to ignore their necessary defects, many of which occurred from mechanical accident in the long course of successive periods of study and attempted exegesis. xrvīšyafit is an aorist formation from a xru, and has no such element as iś = 'to wish,' in it.

⁵ I would correct my oversight in following Ner.'s *pīdayitari, which should have been *pīdayitari (sic), read as nom.: 'do thou, O Haoma, as enraged'; so as of course.

contention (lit. the smiting) [that is to say, declare thoroughly the (defensive) remedy for it].

97. Against the wicked man, the tyrant, who has delivered a hurling¹ [who has thereby hurled a hurling upon persons],

(98) when he may approach the person; i. e. toward the saint, O Hōm the golden, for him also thou revealest the blow (showest battle), [that is to say, thoroughly declare the (defensive) remedy for it].

99. Against the unholy infidel, the destroyer of the world, i. e. against the herbad and the destour² who gives his attention and (utters) his speech, and may not attain to the matter in action, [that is to say, it is not made effect (or 'is not carried out by him'); he thinks, and says thus: 'I (will) do a thing,' and they (such as he) would not do it],

(100) who may (that is, when he may) approach the person, toward the saint, O Hōm the yellow, for him also thou dost make manifest (thy) smiting (showest thy blow), [that is to say, declare thoroughly the (defensive) remedy for it].

101. Against the harlot, (and) the sorcerer, even the (false)³ pleasure-maker, [that is to say, they (such as she) would make a thing a ruin], against the one who brings protection*,⁴ [that is to say, they (such as this one) would accomplish the protection* of (harmful) sinners] who on that account (for his (or 'her') sake) causes the mind to fluctuate like the wind-driven cloud,⁵

(102) who (or 'when she or he') would approach the person, toward the saint, O Hōm the yellow, for this one make manifest thy smiting . . . (show thy blow) [that is to say, declare thoroughly a (defensive) remedy for it];

(103) (yea) when (moved) by those (influences)⁶ she (or 'he') may approach the person, i. e. toward the saint, O Hōm the yellow, for him make manifest thy smiting; [that is to say, thoroughly declare a (defensive) remedy for it].

[The translator, in apologizing for the misprints in the text, published in the twenty-third volume, first half, calls attention to the corrections also published in the same volume, second half, p. 357.]

¹ I think that this hint as to 'hurling' is valuable and correct.

² So spelt to improve the euphony, dastūr having a disagreeable sound.

³ So, it is better to accept mūdak' in an evil sense.

⁴ As may be seen from SBE. xxxi, I do not accede to 'protection' as the meaning for upastō here. I compare Sk. upāstha=bosom; to upās=bosom ('protection'=access(?)). ⁵ Lit. 'of a wind-driven nature'

⁶ Possibly min valāšān is merely intended for a genitive.

The Great Behistun Rock and Some Results of a Re-examination of the Old Persian Inscriptions on it.—By
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EASTER MONDAY, April 13, 1903, will remain for me a memorable date in the calendar, for on that morning, after four days on horseback from Hamadan, I caught my first glimpse of the mountain of Behistun and the great inscription of Darius. For miles before one reaches it the huge mass of rock is constantly in sight, lifting its giant head 1700 feet above the plain; and several times in the distance my eager eyes were mistaken in fancying I could see from afar the smoothed surface where the Great King's edict is inscribed. This was an error, for in approaching by the Hamadan road one must round the north-west corner of the mountain before the inscription can be seen. It was shortly before noon, or to be more accurate, 11.25 A.M., when my caravan halted at the base of Bisitun, as the Persians call it, and far above I could see the inscription and the sculptured figures which the natives term 'the Nine Dervishes.' With all I had read about Behistun, with all I had heard about it, and with all I had thought about it beforehand, I had not the faintest conception of the Gibraltar-like impressiveness of this rugged crag until I came into its Titan presence and felt the grandeur of its sombre shadow and towering frame. Snow and clouds capped its peaks at the time, and birds innumerable were soaring around it aloft or hovering near the place where the inscriptions are hewn into the rock. The position of the latter is worth noting again. From the descriptions I had read, or perhaps from the mental picture I had previously formed of the scene, I had always fancied that the inscriptions and the sculptures were carved nearer the middle of the mountain, whose general contour on this side runs from northeast to southwest. Not so. They are cut high up in the side of a steep gorge or craggy gully that makes a deep gash in the face of the rock and extends three hundred feet downward to the plain beneath. But before continuing further with the description, it

may be well to turn to the middle part of the mountain front itself and see how it is occupied.

As one faces the great Behistun rock, the striking feature which catches the eye is a huge space carved out near the central point but left entirely bare of an inscription. Even Ker Porter, *Travels*, ii. 149-162, seems to have given less attention than it deserves to this magnificent *tabula rasa*, the more conspicuous because of its vacant wall-like stare. It must have been prepared with an especial design of recording some historic event, as I felt certain after devoting part of an afternoon to a study of it. A space of nearly five hundred feet in length (for I paced it off) and over a hundred feet in height has been cut out of the mountain front to form a rocky canvas for commemorating some record of importance. The idea that it is due to mere quarrying vanishes at once when one studies the appearance of it and observes the evident design. Two rocky ledges, one proportionately higher than the other, are cut on either side to furnish a nearer means of access to the mammoth screen, while the overhanging canopy of hewn-out rock forms a frame-work above, and a terrace of earth and stones offers an approach to the place from below. Such is the general scheme and arrangement. The question naturally arises, and is always asked by those who have seen the great blank space: 'When and by whom was it cut, what was its purpose, and why is it without a trace of the cuneiform chronicler's chisel?' To this inquiry the natives respond by saying 'it was the work of Ferhad.' The sentiment of such an explanation will appeal to every reader of Nizāmi's romantic epopée; he will recall the tragic story of the enamored sculptor and the lovely Shīrīn, and he will trace in fancy the marks of the ambitious wooer's steel, or hear the ring of the mallet as the rock yielded to his herculean blows. But the classicist at the same moment will remember a passage in Diodorus Siculus, 2. 13, telling how Semiramis visited 'Bagistanon,' encamped nearby, built a 'paradise' on the spot, and recorded the occasion by an inscription on the mountain. The quotation from the Greek author is worth repeating for the sake of comparison:

'When Semiramis had brought to an end the works upon which she was engaged, she set out for Media with a large military force and halting near the mountain called Bagistan, pitched her camp there. She

made a park, twelve furlongs in circumference, in the plain which has a great fountain that waters all the cultivated area round about. The mountain of Bagistan is sacred to Zeus, and on the side toward the garden it has steep rocks extending upward to the height of seventeen furlongs. On the lower part of this she caused her own image to be carved, with a hundred lance-bearers standing round about her. She inscribed likewise in Syriac characters (*Συρίαις γράμμασι*) in the rock, that "Semiramis had ascended from the plain to the top of the height by laying the packs of the beasts of burden that followed her one upon the other."

That we have in this passage a direct allusion to our rock is undoubted. The only question is whether the story which Diodorus gives is to be applied to the unlettered space or to the familiar sculptures and inscriptions of Darius. The difficulty with the former application is the fact that a careful examination of the huge central table does not reveal the slightest trace of its ever having been inscribed. I studied it with great attention, having in mind the Diodorus passage, and I asked also the judgment of my native servant, who was very intelligent in such matters; but I could not convince myself that this portion of the rock had ever been engraved, or that an inscription had been obliterated. If one were inclined to theorize and to build up a fanciful hypothesis on flimsy foundations, it would be easy to suggest that King Darius, after completing the well-known record and sculptures, had directed the present vacant space to be prepared for a memorial of his later deeds, especially the campaign against Greece. The misfortunes at Athos and Marathon, the uprising in Egypt, and the hand of death, frustrated his plan, changed the course of history, and left the blank page on the rock to bear witness *e silentio* to the triumph of Hellas and the beginning of the downfall of Iran. But this is mere guesswork, idle fantasy, especially when one asks why Darius should have reserved the central and best position on the mountain for the last. All that we can say is that the general appearance of the place and the nature of its surroundings gives the impression of great antiquity. So much for the blank and unfinished wall space. We may now turn to the well-known tablet and sculptures that form the special subject of discussion.

As stated before, the great record of Darius is situated farther to the northeast, some four or five hundred paces removed from the central point. As one stands beneath and looks

three hundred feet upward within the rocky ravine, the general outline of the inscription and the figures of Darius, the two viziers, and the ten captive kings, come clearly into view. It is easy to understand why the natives regard the latter as 'the Nine Dervishes,' because the prostrate figure of Gaumata, with his upstretched hands, is not so easy to distinguish in the distance. As to Skunka with his high Scythian cap, I am inclined to agree with the view that his figure was added some time after the others were carved. Viewing the smoothed spaces, where the inscriptions are cut, the general arrangement could be made out, if one knew it beforehand, of the Old Persian in the center below the sculptures, the Neo-Elamitic to the left of the ledge, and the Babylonian above this and also above on the right. The familiar broad bands indicating by their peculiar grayish color where the water had streamed down and washed away portions of the inscription were all too plain. Even at the moment, water was oozing out from the upper part of one of the tablets and trickling over its face. It was evident at a glance that a telescope would be of no service in copying the lower part of the Old Persian text, because the projecting ledge cut off a portion of the inscription from below. It was necessary to get nearer. Climbing past huge boulders and fragments of fallen crags, which make the ascent of the gorge not easy, it was possible to get closer to where the tablets and sculptures are. The precipitous sides of the gorge form an angle; the Darius record is on the side that faces almost directly toward the east. The opposite wall or other face of the shaft-like ravine is so steep and rugged as to defy the climber's attempts to ascend it for the purpose of photographing the inscriptions from their own level. The natives assert that it is practically impossible to mount this side of the rocky couloir. The question came, how best to ascend to the inscriptions.

Having heard from a Persian friend that it would probably be best to be let down from above, I had previously studied some of the methods employed by the bird-nesters in the Hebrides in being lowered by ropes over craggy cliffs. A brief examination of the situation, however, showed that the only feasible approach was by climbing and being drawn up by cords. In less than an hour the preparations for the task were begun. Meshed Ali, the owner of the caravanserai nearest to the rock,

found five men who were ready to undertake the ascent. A sixth, Kūlī, the guide and best of them all, was added later; and the procession with ropes and a ladder was soon under way toward the beetling precipice. Whatever may be said against the ladders, which proved of little use, nothing can be maintained against the Persian goat-hair ropes, for their quality is excellent. The cords that bound the luggage on the caravan pack-horse, supplemented by ropes furnished by the Bisitun guides, and firmly fastened about the chest with knots that only a Persian knows how to tie, were a pledge of surety against slipping and gave confidence for the climb. The stout protest of the guides against my riding boots was well founded, as the risks of the first day proved; but a happy substitute for these was later found in the native *gīvāhs*, resembling rough tennis shoes, which were loaned by one of the Persian bystanders and firmly sewn upon the feet with a heavy pack-thread needle. All then was ready. The exciting task began.

The ascent of the first huge fissure in the side of the couloir, the clamber with torn hands and clothes along the brink of a precipitous crag, the tugging ropes that helped up the steep incline of the second rock, the scramble past the thorn bush that barred the way farther up, and the final tug and spring that brought to the edge of the ledge, together with *sailī wāb* 'very good,' and the encouraging word of the guides, 'no fear now, the danger is over'—will not readily be forgotten. Only when one has stood on the narrow ledge by the side of the inscriptions and looked out over the magnificent plain far beneath, and listened to the dull murmur of the stream below, as it bursts from the mountain's base, does one know how to appreciate Rawlinson's work. It may interest others, as it did me, to learn that he has carved his name in the stone, a few inches below the very inscriptions which he first made known to the modern world. This he was entitled to do, and one is almost inclined to append after his simple 'H. C. Rawlinson, 1844,' the words of ancient India's homage—*namo namaḥ*.

In the words of Rawlinson, 'the climbing of the rock to arrive at the inscriptions, if not positively dangerous, is a feat at any rate which an antiquary alone could be expected to undertake.' On the first day it took a while to get somewhat used to the giddy height, so I devoted my attention to examining the gen-

eral condition of the rock, making notes, observing the sculptures, which one can study better, however, from below than from the ledge, and to getting the size of the cuneiform letters and of the tablets themselves. The four columns of the Old Persian record are each about six feet broad. The exact measurements in meters, if one cares to have them, are: 1st col. = 1.90; 2d col. = 1.94; 3d col. = 1.95 (approx.); 4th col. = 1.94 (approx.). The 5th column I did not measure, owing to the difficulty of its position. The place occupied by the Neo-Elamitic (Scythian or Median) inscription is around a crag to the left of the Old Persian, as one faces the inscription, and my most reliable guide wished to quintuple the price for taking me there, while the Babylonian tablet on the overhanging ledge above to the left and to the right is absolutely inaccessible, as Rawlinson himself discovered, when all his guides failed him and he found only one Kurdish shepherd lad who would venture and who accomplished with difficulty the risky task of taking the squeezes of that inscription (see *Archæologia*, xxxiv (1850), pp. 73-75, and the *Memoir of Sir Henry Rawlinson*, by his brother, Canon George Rawlinson, pp. 156-157). On looking at the mass of scarped rock one wonders how the daring boy ever accomplished the perilous feat. Perhaps he still lives and can tell, but, as regards Rawlinson, I could not find the slightest recollection of him among the inhabitants of whom I inquired; but his special Persian guide died a couple of years ago at Hamadan, as I learned.

A study of the Old Persian tablets soon revealed the fact that the inscription has suffered much since the days of Rawlinson. Mention has already been made of the water that was oozing from the upper part of the inscription when first I saw it, so that it was wet in places for the space of several feet. Some photographs, which I succeeded in taking on the second day upon the ledge, make clearer what we have lost and are losing, and I fear that other and fresher proofs of this will be found when the rock is examined with more detail than was possible in my short week's stay. But to one point I wish to call attention. I found that after the eye had become accustomed and had some practice, it was possible to restore lost letters and words by a careful examination of the indentures which the heavy stroke of the engraver's chisel had left in carv-

ing the character. The head of the nail-shaped letter (for the Behistun letters look perhaps more like nails than like wedges), can still be discerned as a dot or hole in the washed away stone; and a knowledge of the cuneiform writing enables one to combine these dots into skeleton letters that often remove all doubt as to the true reading. I understood how Rawlinson must sometimes have done this, and more easily, because the stone had suffered less in his time, I believe, than to-day. In contrast to the disintegrated parts, however, stand those portions where the water has not mutilated and defaced the rock. Here, instead of the peculiar dull steel gray bands, we have the beautiful brown color of the inscription as perfect as when the stone-cutter of Darius laid his mallet aside. No granite tablet in Central Park or Trafalgar Square could be more perfect. It was interesting, moreover, to compare the style of the Behistun characters with the somewhat larger letters of the Ganj Namah inscription (Dar. Elv. and Xerx. Elv.) which I had been examining at Hamadan the week before. On Alvand the space between the lines was 4 inches and each letter averaged nearly 3 inches in height. At Behistun, where economy of space was necessary owing to the length of the inscription, the sharply drawn lines were about $1\frac{1}{2}$ or $1\frac{5}{8}$ inches apart, and the clear cut letters each about $1\frac{1}{4}$ inches ($3\frac{3}{4}$ cm.) high. The brown shellac or varnish made them stand out in bolder relief and gave a fine finish to the whole, although I could see no traces of the 'flakes' of the cement, which Rawlinson speaks of as having sifted down upon the narrow ledge; nor again did I observe any evidence of letters being preserved by reason of this shellac withstanding the water when the rock itself had disintegrated beneath (JRAS. x. 193, O. S.). But this may be still another proof that the rock has suffered since Rawlinson's time, and it is to be hoped that M. de Morgan will make casts of the entire inscription, as I learned in Persia it is the intention of his mission to do. My own attempt to take squeezes of certain words was a failure, due partly, among other causes, to the wind, which prevailed during the four days when I was up on the ledge, and was the stronger owing to the height and the peculiar formation of the rocky cut. This made me wish for more time so as to wait for other conditions. Owing to the physical strain of the ascent, for it requires some athletic

prowess, and owing to the exciting interest of the work, which is somewhat of a tax on the nerves, the element of time is necessary for accomplishing what one would wish to do. To this I may add that money is likewise an indispensable factor in the equation. But above all one must not be hurried. On the last day of my stay, for example, after I had finished all I could reach or clearly see, I begged the guides to let me use the ladder in order to examine some of the less certain readings in the upper part of the inscription. This they stoutly refused to do on account of the extreme danger from the high wind blowing at the time. And that afternoon I was obliged to start back to Hamadan. But although some points like these had to be left, I was glad to find I had been able to examine most of the doubtful passages and to prove in general the wonderful accuracy of Rawlinson's transcript. To this I shall revert also below when I speak of the two or three photographs I took, the first I believe ever taken on the ledge and they were 'snapped' as I leaned out over the precipice, held by the guides, while focussing the camera and hastily taking the picture. Most of my time, however, was spent in copying, collating, or verifying the readings on the rock itself without resorting to my photographic apparatus. I may only add regarding the means of ascent in ancient times, that there is not the slightest trace of any thing of the kind to-day. If ever there was any, it can not have been of a permanent material. Regarding the descent, when I had been for hours on the cramped and narrow ledge, the going down seemed much more difficult than the ascent, and it was a joy each time to hear my faithful Persian servant, Safar, call out from below, 'Now you are safe,' when I passed the last dangerous place. The unloosening of the tight-bound ropes quickly followed with his aid. All had gone well.

So much for the incidental side. I now turn to the far more interesting and important matter of what I was able to note, verify or restore.

Bh. I. 47, *āy's'tā*: the reading of each letter is quite clear.

Bh. I. 51, *paranam*: reading absolutely certain.

Bh. I. 65, *riθ'h'iš'-ā*: barring this troublesome word, the entire line from *-čariš gaθāmēā māniyamēā* to *tyādīš gaumātām kya* is quite as given in Spiegel and Weissbach and Bang,

except that the *y* and *u* of Gaumata's name are defaced, and the *y* of *hya* is illegible, owing to the weathering of the rock. The question arises with regard to the much discussed word beginning with *ri* in the middle of the line. The latter part of the word is mutilated, but my memoranda show that we must accept two letters after *-biš*. The latter I have marked as 'apparently *ā*,' the former I noted at first as 'illegible,' but added afterwards 'probably right as *ā*.' This shows the bearing of Rawlinson's 'extremely doubtful' as regards the *ā* at least. A photograph which I took of the first part of the word *riθ^uh^uiš^u-ā* is interesting as showing that there is no *i* inserted either before or after the *θ*. This is a matter of importance for future reference. I am not unmindful of the various places where this word has been discussed in the journals—the most recent is Gray, JAOS. xxiii. 56–60. [Regarding *abi-* or *abā-* of *abičariš*, I unfortunately find on returning to America that I had made no special memorandum, but my inference from the absence of a note is that the text stands as first given by Rawlinson (*abi-*) and also by Weissbach and Bang, because I had the latter volume with me on the rock and should probably have recorded a variation if there had been one.]

Bh. I. 66: my memoranda and 'snap shot' photographs of portions of l. 66 show that this line stands as given in the received editions, excepting the *č* in *pārsamēā* and the final *mēā* of *māda*[*mēā*]. But this is a matter of minor importance. My 'snap shots' also help to assure the accuracy of several other words in ll. 65–70; I only wish I had taken more photographs, despite the great difficulty in using the camera on the ledge.

Bh. I. 86, *m^u-y^ukānnā* (?) etc.: the first letter of this word is very uncertain, but the notes which I made upon it on two different days seem to confirm the accuracy of the initial *m*. My notes on the last occasion remark that the first part of the word looks more like *m^u y^u*, and I twice sketched the remnants of the cuneiform characters with a special comment on the very scanty space between the *m* (?) and the *y*. My second drawing in pencil indicates more especially the illegibility of the *m*, which is inferable, however, from the partial dots that are faintly visible, but may be made out with difficulty. The same sketch seems to emphasize again the small space between it and the *y*. [On returning to America and gaining access to my

books, I find that whereas in JRAS. x. p. xlv. (O. S.) Rawlinson says 'there would appear to be a sufficient space for two letters between *m* and *k*,' he afterwards corrects this statement (JRAS. xii. p. ii., O. S., Appendix; cf. Bartholomae, IF. xii. 132, note) by noting 'there is only one character wanting in the word *ma-kāwā*.' This later remark would agree precisely with my own independent observations.] As to the correctness of *y*, which is not given in any of the editions except in the text of Weissbach and Bang and is marked doubtful by them, I have no hesitation. Both my pencil sketches of the cuneiform characters present a *y''*, and so do my memoranda. The last part, *-kāwā*, of the word under consideration is perfectly clear, as my notes on each letter show. The only Avestan word that I can recall that is at all like this dubious *ma^ay''kāwā* is Av. *maēkaintiš* Ys. 38. 3; or is it beasts of burden, cf. Sk. 2 *nāya*. As to the reading of the two words *adam kāram*, which stand before this provoking word, there is no uncertainty.

Bh. I. 86, *aniyam ušabārim*: an examination and re-examination of the rock proves the certainty of this reading. The word-divider precedes the *u* and is all right. The *u* itself, while not clear, can be made out sufficiently well, for I examined it on two different occasions, in order to be perfectly sure. The *š* was found to be beyond question, and that without noticing the loss of any sign after it in the margin, as Foy, IF. xxxv. 36, would assume. The chiselling of *-bārim* in the following line shows that portion of the compound to be perfectly clear. Oppert's original conjecture *ušabārim* would therefore be substantiated. I refrain here from entering into a discussion of the derivation of this much mooted word.

Bh. I. 87, *aniyahyā asam* (sic) [...] *āniyam*: the form *aniyahyā*, as given, is accurate, though the word is damaged. The reading *ašm...* of Spiegel, Kossowicz and Tolman, or *tašma[kam]* of Fr. Müller, WZKM. i. 222, xi. 253, and *as[pā]* of Weissbach and Bang, though the latter were on the right-track (cf. Gray, AJP. xxi. 21), must be abandoned. The word is simply *asam*, 'horse' (acc. sg.). The *m* at the end is very distinct; the *s* is very plain; and the initial *a* is quite clear. To these comments my note-book further adds, 'the word-divider after it is quite clear.' Further conjecture therefore is unnecessary and I find my observation as to the *m*

receives additional substantiation from Rawlinson, who read 'asm . . . ānāyam,' but he did not notice the word-divider after *asm* and consequently vocalized the word erroneously. The old difficulty, however, still remains with regard to the obliterated prefix of [...]ānāyam. Over each of the cuneiform letters of the legible part, -ā n" ḡ" m", I have written 'O. K,' i. e. 'all right,' in my note-book. But on examining the conjectural *pati* as prefix in W. and B. I have added a memorandum '*pati* extremely questionable; the initial letter can hardly be *p* at all.' In fact, as my notes continue, 'it is hardly possible to read the prefix,' because the rock is so damaged. I appended a further note that the appearance of the word suggested rather [*up*]ānāyam or [*uz*]ānāyam. As to form and composition neither of these prefixes would be impossible, as I have since found on being able to consult the verbal prefixes under $\sqrt{n\bar{i}}$ in my Sanskrit dictionary. But such a restoration is quite uncertain, though I tried my best to assure it by examining the weathered stone again and again. Whatever the prefix may be, the sense seems clear when combined with the new reading *asm* (acc. sg. for plur., special for general) so that the sentence may be rendered *anīyahyā asm* [*up*]ānāyam 'I brought up horse(s) for the rest (of the army).' This interpretation is apparently also in accord with the Elamitic version, cf. Weissbach, *Achämenideninschriften Zweiter Art*, pp. 63, 64, and Foy, *op. cit.* xxxvii. 554.

Bh. 1. 88, exit *avadā*, in hoc loco: the reading of Spiegel, Kossowicz, Tolman, Weissbach and Bang, is wrong as far as *avadā* is concerned, and that too despite the fact that Spiegel, *Keilinschriften*, p. 11, n. 88, is following the authority of Rawlinson's revision (JRAS. xii. p. ii., O. S., Appendix). The rock plainly gives *avam* at this particular point, even though *avadā* occurs often elsewhere in the inscriptions. The *m* of *avam* is clear, as is shown by my notes and sketch of the cuneiform characters. The *v* is not quite plain, but can be made out. Regarding the initial *a*, there is of course no doubt. In JRAS. x. 211, etc., Rawlinson originally read quite correctly '*avam kārām*' 'that army,' just as in Bh. 2. 20, 21, 41, 46, etc. There was no occasion for his departing from that. It may be added by way of supplement that the letters -āva of the adjacent word [*pas*]āva are right, though the first part of the word is broken.

Bh. 1. 92-96: the *t* in *nadītabaira* (1. 92) is legible, and may reasonably be removed from italics in our transcribed editions of the text. I made an incidental note also that *āiša hadā* (1. 93) is accurately recorded in our texts, and that *akumā* (1. 96), though defaced, is still legible. There were evidences also that the rock has suffered since the days of Rawlinson.

Bh. 2. 59-61: these three lines are precisely as given in Rawlinson and Spiegel. The lacuna indicated by Weissbach and Bang in '*nā...avam karam*' (1. 61) is wrong and is evidently due to a misprint (not noticed by Bartholomae, IF. xii. 135). In printing, the two points .. have presumably slipped in by mistake from the fragmentary *-iyamanam* in the next line. This note applies therefore merely to the W. and B. edition.

Bh. 2. 75 (cf. 2. 79), [*čašma*] *avajam*, etc.: at the beginning of this line the *y* of *utāša/iy*, though faint, is nevertheless to be inferred from the indentures or dots that are still quite distinguishable. Recall what was said above on such dots as means of restoration. The obliterated word, read as *čašma* or *čauršma*, yielded no new results and is equally illegible in both 2. 75 and 2. 79. At 2. 75 I have merely noted regarding the fragments of an internal letter that it 'looks more like an *h* than it does like an *š*,' but the likeness between the two letters in the cuneiform character leads easily to misapprehension, and certainly *čašma* suits the sense, for the loss of an eye or both eyes, afflicted as a punishment in addition to other mutilations, is precisely what one notices or hears of in remote parts of Persia to-day as in the days of King Darius. The sight is destroyed by means of a red hot iron brought near to the ball—see, for example, A. H. S. Landor, *Across Coveted Lands*, ii. 191. This latter observation may throw some additional light on the meaning of *avajam* (1. 75). The reading of this word is beyond question. So also is *duvarayāmai*; but *basta adāriy* must now be put in italics in our editions, as I found both words illegible—still another proof of the damage done by the water since Rawlinson examined the rock some sixty years ago. Simply by way of record it may be worth adding that the last two words of this line, 1. 75 *haruvašim k/āra* are in perfect condition at present.

Bh. 3. 87-91: some time was spent in trying to see if anything new might possibly be got out of the closing lines of the

third column, but the action of the water had so completely obliterated the words that even the two last words at the bottom of the tablet were less clear than they were to Rawlinson. My notes show that *āp* of [*uzmay*]*āpatiy* may be inferred from the faint remnants of these two letters; the last part of the word is all right. The *k* of *ākariya*¹*tām* is apparently rightly read; I have added '*k* is best,' but have repeated that it is much damaged.

Bh. 4. 46: so far as the first three words *ršaya/θiya vašnā auru*[*mazdāhu*] are concerned, the reading is as in the texts already cited; but I was able to make out the faint remnants of *m"z"ā"* in the divine name. In the fourth word, like Rawlinson, I could only read the latter portion, or *-maiyy*, so there is still an opportunity for conjecture, and the suggestion of Gray, JAOS. xxiii. 62, to read *avāt-maiyy*, is as satisfactory a way of filling the lacuna as any. The word *aiyašēiy*, furthermore, I have marked with an 'O. K.' (all right) in my memoranda.

Bh. 4. 49, *avah/yā paruv θuda* . . . : the first two words are clear, but the verb is in bad condition. Its introductory part, however, can be made out and I have marked the *ā* as 'O. K.,' but with the latter part I could do nothing.

Bh. 4. 50, *maniy*[*ā*]*t*[*iy*]: despite the syntactical grounds favoring a subjunctive we must accept a short *ā*, judging from the rock, unless my memoranda have failed me. On the margin of my text I have distinctly recorded, 'no space for long *ā*: what remains of the *t* comes directly after *y*.'

Bh. 4. 51, *paruvā ršayaθ*[*iyā*] . . . *ātā āha*, etc.: the first two words are quite clear on the rock; the remnants of the third one I read as . . . *ātā* without looking at either of the printed texts of Sp. and W. and B., which I had with me. Rawlinson, followed by the later editors, gives only the final *ā*, whereas I distinctly made out . . . *ātā* independently, as stated. Weissbach and Bang conjecture [*yāt*]*ā*; but if one is to make a guess I should think that [*āā*]*ātā* (cf. Av. *āzātu* 'noble born') or [*ām*]*ātā* (Bh. I. 17), as an attribute to *ršayaθiyā*, would be as good a way of filling the lacuna as any. With regard to the next word, I have noted: '*āha* can be made out on the stone without question.' The reading, therefore, is assured, and I have marked *avaišām* and *astiy* as all right; but the *niyy* between them is no longer clear, although it may be inferred

from the appearance of the stone. Accordingly I have marked it 'O. K., inferable.'

Bh. 4. 53, *dāraya[vanš xšaya]θiya nūram*: the name of King Darius is apparently somewhat more damaged now than in Rawlinson's time; but that is a minor matter. More important is a memorandum regarding the absence of any break before *nūram*. In my notes on the margin I have drawn a circle around the dots in the W. and B. edition, to indicate that the lacuna is to be struck out, and have added a definite memorandum, 'omit the space; the word *nūram* comes after the word-divider that followed [*xšaya*]θiya.' Foy's conjecture of *adā*, KZ. xxxv, 34, n. 1, is therefore needless.

Bh. 4. 64, *naiy zurakara āha[m]*: the last part of *naiy* is much broken, but the reading appears to be all right. On examining *zurakara* I first noted 'not wholly clear, as the stone is somewhat marred, but still *z u r k r* does seem all right.' On re-examining it the following day in a better light, I added that the reading is confirmed. [On looking up Rawlinson I find that he gives the cuneiform quite clearly, which again bears out the idea that the rock has suffered since.] As to *āha[m]* I have marked 'all right' over *āh^a* and have added 'probably right' over what can be made out of the final *m*. The printed editions have the same.

Bh. 4. 64, [*naiy adam na*]imaiy tawnā: I was not able to make anything out of the missing letters that are indicated here by being enclosed in brackets, and I wrote 'absolutely illegible to me' over [*adam*]. But on the last day in the strong sunlight I corrected this, by a supplementary remark that 'I fancied I could discern the *a* quite clearly, and remnants of the crossbar and upper parts of a *d*, together with a fragment of the horizontal wedge and possible traces of the indenture, caused by the deep strokes in the nail-heads of an *m*.' This therefore is something towards assuring the accuracy of [*adam*]. Regarding the first *i* in [*na*]imaiy I have noted that it is 'right but broken badly.' As to *tawnā* there is no doubt. The reading is quite accurate, as in all our texts. The next three words, and those following, called for much study, the results of which will now be given.

Bh. 4. 64, *upariy ā^{ba}ra}štām upariy*: I spent much of my last two days in examining this passage, which was one of the

incentives for my going to Behistun, because of the bearing of the whole sentence on the question of the religion of Darius as a Zoroastrian and the faith of the Achaemenian kings, which I have discussed in JAOS. xxi. 169, 172-175. I returned to the line again and again, studied each word under different lights, sketched it, and made rubbings, so far as I could, or dared, lest the stone in any way should become injured. Regarding the two *upariy*'s, the first is much damaged and is difficult to read; but on the last day I was fortunate in having bright sunlight, so that I could examine it well and compare it again and again with the similar word at the end of the line. I found distinctly that it is *upariy* (with *u*) not *aparīy* as has been suggested (e. g. KZ. xxxv, 45, n. 1). This first *upariy* therefore remains unchanged, as in Rawlinson. I came to like results as to the second *upariy*, which is more distinct. Over its *u* in my text and over part of *y* and over *y* I have written in my book 'all right.' Below the part *puri* I have marked 'much defaced.' But on the following day when the sun was bright the word came out quite clearly and I appended the note, it is 'all right.' Therefore the second *upariy* must likewise stand, as in Rawlinson.

I was most anxious, however, to examine the word between these two and to find whether it is *abištām* (R.₁), *abaštām* (R.₂) or *ārštām* (Foy's conjecture)—see my remarks in the article already referred to, JAOS. xxi. 169, 172-175. Great care and attention were spent in the examination, and after working on the individual letters I made it a point to turn to something else and then to return again and again to verify my memoranda and my sketches. In the first place, there is no *i* in the word; any such reading as *abištām* must therefore be dropped. We have therefore to do either with *abaštām* or with Foy's conjecture *ārštām*, the point being merely whether our text has a *b* or an *r*, because each of the other letters *a.štām* is perfectly clear, as my memoranda again and again show. The whole question between the two mooted letters is whether we have the slight horizontal mid-bar of the cuneiform Ξ *r* or simply the two parallel wedges of the \sqcap *b*. I must mention at once that the shape of the cuneiform character for *r* on the Behistun rock does not exaggerate the middle of the three horizontal strokes so much as in the type of our printed editions. I noticed this particularly and my photographs taken on the ledge

also bring it out. Therefore the middle wedge is naturally less prominent, and when defaced by the action of the water, as this word has been, it becomes very faint. A moment of uncertainty also arises as to whether it be an intended indenture or an accidental dot, because of the peculiar brownish mottled appearance of the somewhat porous stone when it is exposed to the disintegrating water. But each time I returned to the word I became surer that Foy is right and *r* not *b* is to be read. I examined the letter in connection with the other *r*'s in the vicinity, when these had suffered from the water, and always with the same result. I believe therefore that *ar^aš^atātām^a* i. e. *ārštām* for *ārštātām* 'Arshtāt, Uprightness, Rectitude' is to be read with Foy and he is to be heartily congratulated on his shrewd conjecture. At the same time, I would suggest the need of caution in making further conjectures. The days spent up on the ledge at Behistun have made me more conservative than ever, and in cases of doubt I should generally rely on the faithful Rawlinson until the rock itself be examined.

Bh. 4. 65, ... *šakaurim* etc.: the text in Spiegel, Kossowicz and Tolman, partly following Rawlinson, gives *upariy/nām naiy šakaurim* *huvatam zura akunavam*; Oppert, *Le Peuple et la Langue des Mèdes*, p. 183, writes it *upariyāyām naiy wārīm naiy druvaytam zaura akunavam*; Fr. Müller, WZKM. i. 60 reads *aparijā/jāma naiy šakaurim* [*naiy ā*] *huvāt-tam zaura akunavam*; Weissbach and Bang present *upariy āyām naiy šakaurim* [*naiy*] *huvatam zura akunavam*; Foy, KZ. xxxv. 45 first suggested a correction of the text, i. e. 'in *āpariyāyām* zu verbessern,' and he altered *šakaurim* into *hukārim*, and *huvatam* into *d^uuškarām* (on which see Bang, IF. viii. 292); Bartholomae, IF. xii. 130 made the radical conjecture *naiy ā^hurim naiy duruvatam*; finally Foy KZ. xxxvii. 557, shifted his ground and made a new guess, *dasurim* . . . [*ai*] *na^hwa^atam*. I can only add that with regard to *šakaurim* suggestions for altering the text may be practically abandoned. The stone plainly gives *š^a k^a u r^a i* (?) *m^a*. Regarding the first three letters, *š^a k^a u*, there is no doubt, as a repeated examination of the word proved. The *r^a* though is very unclear, but the holes or dots of the defaced wedges would allow an *r*. The same is true of *i*, which looks somewhat like an *ā*, but the dots favor an *i*. The final letter *m* is marked in my notes as 'even

less clear, but the dots would not be against *m*;' and on a third examination I became still surer of the *m*. I added a remark to the effect that the passage must have suffered since Rawlinson's time.

As to the first part of the line, which is variously given as *mām naiy*, or *āyam naiy*, etc., I confess that when I first read the fragmentary second element I marked it as agreeing with *naiy* in the transcribed text which I had with me. But on re-examining the damaged fragment I recorded in my note book that 'instead of *āyam naiy*, it looks more like a long word ending in *-h'iy* or *-j'iy*—the former, *-h'iy*, is however better, and it seems so to be clear.' Later I added again 'it does not look like *naiy*.' This makes the question of the reading *naiy* just a bit uncertain. [On returning to America and gaining access to Rawlinson's draft of the cuneiform characters, I am interested in finding that he also has *-h'iy*, and he must likewise have had the impression of a longer word as his *y' . . . t'h'iy'* seem to prove. Yet in his later revision (JRAS. xii. pp. viii, O. S. Appendix) his cuneiform text runs *up'raiy'* *m'am' naiy'*, with which Spiegel and the other editors have operated. With such a reading I could only understand *upariy mām* to mean 'beyond measure' and compare (as I did some years ago) Avestan *avi mām*, *yathā-mām*, Vd. 5.60, 61; Yt. 5. 127.] But I must refer again to my impression of the defaced word, which was similar to Rawlinson's original impression also.

n[aiy]: regarding the other word after *šakaurim*, I have noted 'the *n* of *naiy*(?) after *šakaurim* can be made out by the dots.' But now, if we begin to hesitate about the *naiy* before *šakaurim*, I begin to feel less sure that the word after it is *naiy* despite the sense. But perhaps I may return to this some day again.

Bh. 4. 65, [*..hvatam*]: for this much debated word, formerly read *..hvatam*, etc., as noted above, I have now some new material to offer. The text is indeed much mutilated, but each of the letters *u v t m* is legible, although the final *m* is in bad condition. On studying the first part of this word, which the editions give as *..hvatam*, etc., I noticed that instead of an *h* as is commonly supposed, we have another letter, a character that looks more like *š*. On looking closer, it became perfectly clear to me that the supposed *š* was not *š* at all but apparently

n“, although this might possibly be a mistaken reading for *n*“, the uncertainty being due to the resemblance between the characters in the original cuneiform if the horizontal bars are somewhat marred. The sketch made in my notes, however, looks precisely like *n*“. A further examination of the damaged part revealed an apparent *m* preceding this, so that we may assume that the word began with *m*. [After coming to this conclusion it was interesting to me to consult my PWB. and find in RV. 2. 106 *manuvrat* ‘wie Menschen, wie es Menschen ziemt,’ which may possibly be of some indirect help in throwing light on this difficult passage. Perhaps we might be tempted still further to recall likewise Av. *manuvaintīm* (i. e. *av* for *uv* in Avestan writing), but such a suggestion might be hazardous.]

Bh. 4. 64, *zura akunavam*, etc.: each letter of these two words is legible, and the same is true with regard to each of the words that follow in this line.

Bh. 4. 66, *v[i]θiyā*: this is rightly read, although the *v*ⁱ is ‘broken, but O. K.,’ and it is ‘hard to be sure of the final *ā*’ although it is ‘probably correct,’ as I have noted in my text.

Bh. 4. 68, *hya aparum ahy*, etc.: these first three words of the line are weathered and defaced, but they are rightly given in the texts. The same may be said of ‘italic’ *martiya* of the editions, but the word is inferable from the stone. With regard to *drauṣṇa*, I have recorded ‘weathered but O. K.’ The subjunctive *ahatiy* stands as in the editions; so does *hyavā*, but it is weathered. Regarding [*ā*]tar[*tā*], the whole word, except the internal elements, is ‘so weathered as to be practically illegible.’

Bh. 4. 69, *ahatiy avaiy mā dauštā avaiy*, etc.: the first and third words are all right; so also is the first *avaiy*, although it is hard to read. The last part of *dauštā* is scarcely legible, though it may be inferred from the appearance of the stone. The second *avaiy* is illegible. The long word *ahifraštādiy* is ‘all right, but partly hard to read.’ The imperative *parsā* is ‘almost illegible.’

Bh. 4. 71, 73 (87), *vikanāhy*: ‘so best with the letter *k*, not *s*.’

Bh. 4. 76, *avataiy avramazdā*: the first word is ‘apparently all right but almost illegible;’ the second, or divine name, is ‘inferable;’ as to *mazānam*(?) of W. and B., I have written ‘illegible’ above it.

Bh. 4. 77, *vikanāh*[*i*]*dīš*: the *k* is 'fairly clear' and 'best read so.' The [*i*] is 'omitted on the stone.'

By this time the westering sun—for one learns in Persia to live by the sun—warned me that I must descend for the last time from the rocky height in order to start once again for Hamadan and begin my journey to Southern Persia. I was loath to leave, but leave I had to at last if I were to carry out my plans for seeing Isfahan, Persepolis and Shiraz, and for visiting the Zoroastrians at Yazd before going to the capital and journeying thence to Merv, Bokhara and Samarkand. On reaching the plain once more there was an opportunity to urge the inhabitants of Bisitun charily to guard their inscription and to tell them of the divine blessings which King Darius invoked upon all such, and of the curses that were assured if it were injured. Time now was up and I left the scene of the great inscription on Friday afternoon, April 17, feeling painfully aware that I might have accomplished more if my time had been more and my means greater, but happy in heart at the thought of having possibly contributed something toward our better knowledge of the Behistun text, and inspired by the hope that an opportunity may in some way be offered me to go again and complete such parts as had to be left undone at the moment.

Notes on the Annals of Ašurbanipal (V. Rawlinson, pp. 1-10).¹—By STEPHEN H. LANGDON, M.A., Columbia University.

COL. I.

Line 12. **Si-Gar** "To establish abundance;" feast day of Gula on the 12th of Ajaru, about May 1st. Gula is identified with Bau, a Babylonian goddess whose festival was celebrated on New Year's Day, March 20th. The fruitful season beginning later in Assyria than in Southern Babylonia, the original home of Bau, her feast day seems to have been changed to a later date in the season. A temple was built to Gula at Kallu by Ašurnasirpal (I. Rawl. 23¹⁸⁶).

1. 37. *ušađilu pānu-a zanin ešrētišun*. I turned my attention to caring for their temples.

1. 46. *hanšu ana ammatu še-am išku ina absinnišu*. Five cubits tall the grain grew in its thriftiness.

1. 48. *ešir ebāru napaš^u Nisaba*. The grain grew tall, the corn thrived.

1. 49. *kaian ušalmabū gipāru*. The fields put forth verdure unceasingly.

1. 50. *bālu šutešur ina talidti (√77)*. The cattle were unfailing in their bearing.

1. 66. *emāki-ia širāti*. Singular noun with plural adj.; see Delitzsch, *Gram.*, p. 328.

1. 121. *imliku ramanšun umma*. They plotted for themselves thus—

1. 126. *ai ibbaši ina birinni šanunma bēlum*. There shall be no other lord among us.

1. 127. *ana kitrišunu*. To keep their compact. *ušzizu √77*.

1. 132-3. (*mamit Ašur*) *tabtu katušun u-ba-a-i-ma*. The oath of Ašur exacted satisfaction for the good done them. The stem

¹ These Notes were originally intended for the second volume of the Series of Semitic Texts edited by Professors Gottheil and Jastrow. Owing to lack of space this material had to be taken from the Glossary, and is collected and published here by the kindness of the editorial committee of this Journal.—S. H. L.

II. 1. of **נִאֵה** is used with *tabtu* in the sense of 'exacting punishment equal to the good done the faithless one by the wronged,' a Semitic idea of divine retribution common also in the O. T. On the use of *katu* as a particle of advantage or disadvantage, see the Glossary.

COL. II.

l. 9. *ali-e eli ša maḥpri ušatir.* I rendered his oaths stronger than before.

l. 21. *illik šimat mašišu.* His fateful night (i. e. death) came upon him.

l. 42. *šu 2500 bilti maštaktišunu.* Whose weight was 2500 hundred weight. *biltu* **בִּלְתָּ**.

l. 57. *ana epeš tuklāti.* For serving in concubinage.

l. 60. *ma'assī = ma'attu;* see *ma'adu*.

l. 74. *šīruššu; uššu* for *šu*; see Delitzsch, *Gram.*, p. 135.

l. 95. *ša nibirti tamti.* See Del., *Gram.*, p. 329.

l. 100. *anu šuttu (וְשֵׁן) annūtu emuru.* On the day that he saw that dream. See **שָׂאֵל** in Glossary.

l. 112. (*pakbušu*) *ušarša baṭiltu.* He stopped sending an ambassador.

l. 113. *iḫbuš libbu.* Pride impelled him.

l. 117. *išlimma.* It came to pass.

l. 121. *ipšit limuttim ša ina niš kāti-ia ilāni tikli-ia ina panabi bāni-šu ušapriku.* Because of the retribution which the gods, my helpers, at my request, hurled against his father [he sent greetings]. *ipšit limuttim*, *casus pendens*.

l. 124. *abā-a tarurna limutta iškakin ina pāni-šu.* My father thou didst curse, and misfortune was prepared before him.

l. 125. *la-šu-ṭa = lu ašāṭa.* Truly I will bear thy yoke.

l. 129. *ittallak* for *attallak*.

COL. III.

l. 26. *ēmissu = ēmidsu.*

l. 32. *šipir ištaraṭi.* The sending of the goddesses, i. e. mission of the goddesses.

l. 53. On this line see **שָׁן** in Glossary.

l. 65. **Ur-Bi.** *Ur = mītharu; Bi = ina. amel Ur-Bi = amel mīthariš* (Del., *Gram.*, p. 220 note). 'One who works with

another;’ hence ‘ally.’ Read *amel mundaḥiru*, friend, ally. Translate: With his allies, my foes of the people of Gambulu.

1. 78. (*ša*) *ēpišuš*. He forgot the kindness which I showed him.

1. 80. *ēliš ina šuptēšu itammā ṭabbāti*. Outwardly with his lips he spoke good.

1. 90. *ina paššūri takni-e ulzišsunuti* ($\sqrt{\text{𐎶𐎶}}$). I set them down at a table of carefully prepared dishes.

1. 93. *adi*. While.

1. 94. *ušaazu*. Remained ($\sqrt{\text{𐎶𐎶}}$).

1. 100. *ina ḫati-ia*. Against me. Dative of disadvantage.

1. 119. *ina šat mēši utūl*. See stem II. 2 of 𐎶𐎶 in Glossary.

1. 123. *ippušu šēlātu*. [Whosoever has plotted evil against Ašurbanipal] stirring up hostility. On the Circumstantial Present see Del., *Gram.*, p. 364.

1. 138. *itba ana kitrišu*. And [who] went into alliance with him.

COL. IV.

1. 15. *aburrū*. A private soldier; see 𐎶𐎶 in Glossary.

1. 18. A second time—*ikbi ū Ummanigaš ki unaššik ḫaḫḫaru*—he spoke the same thing in regard to Ummanigaš when he kissed the ground.

1. 29. *ḫaḫḫaru ušēsir ina ziknišu*. He touched the earth with his beard; see 𐎶𐎶. For a different rendering, see Del., *HW.*, stem III. 1 of 𐎶𐎶.

1. 30. *manzaz^{tu} mašāri iṣbat*. He followed close after my chariot wheels.

1. 32. *aššū ēpeš dinīšu*. That I would render him justice.

1. 42. *ša itti S' iššaknu*. Who were brought into alliance with Sammuges.

1. 56. *napšatsun panuššun tēkir*. Their life was dear to them.

1. 63. *ḫātū-a = ina ḫāti-ia*; see Del., *Gram.*, p. 222 e.

1. 66. *amel šābē šuatumu sillatu pišunu ša ina eli*, etc. As to these soldiers, because of the insolence of their tongues in that they spoke insolence against Ašur my god, etc. Two cases of *casus pendens*; one, *šabe*, introducing the thing concerned, and the other, *sillatu*, giving the cause; cf. II.¹²¹

1. 70. *sitti nīšē baṭṭusun ina šēdi lamassi ša Sin-ahī-irba ina libbi ispunu eninna anaku ina kispišu nīšē šatumu ina libbi aspun*. The rest of the people I took away alive; at the place

of the bull-god where Sennacherib was slain, now in memory of his death I slew these people there. Cf. II Kings xix. 36.

l. 86. *ina šipir išippāti.* By commissioning the priests.

l. 118. *ša allaku.* As I was going. Circumstantial Present; cf. III.¹²³.

l. 122. *imkutnimma* for *imkutnimma*; see Del., *Gram.*, p. 91 (end).

l. 127. *ellamā-a.* See אֵל in Glossary.

COL. V.

l. 23. *ša ašpuru rešātsu.* In that I sent him assistance.

l. 26. He said to himself: "The peoples of Elam are returned to peace *ina pan Aššur šaru šinuma irrubtinimma* with Assyria; let some here, some there enter [and plunder Elam]."

l. 41. *ina taiarti-ta šu šullummē.* Upon my prosperous return. See Del., *Gram.*, p. 329, 2.

COL. VI.

l. 17. *belē karabi simānā (√DD)* *minma epeš taḥāzi.* War-like weapons, the proper equipment, whatever is used in battle.

l. 30. *ilu Šušinak ilu pīristišim ša ašbu ina puzrāti.* Šušinak, their god of wisdom, who dwells among mysteries. Šušinak = Elamite Ninib, on the basis of II. R. 57 c, 49; cf. also II. 60 a, 10 and b. 9. Ideograph *suh-šêš*. Suh = *ramkutu*. *ilu šu ramkutu* = Ninib, i. e. 'God of the priestly function.' Šêš = *pašāšu* 'to anoint;' hence *ilu Suh-Šêš* = 'God of the anointing of oil.'

l. 63. *adī la baše-e.* Until there were none.

l. 64. *amnā ana zakiki.* מנה with *ana* 'to give over to.'

l. 87. *amel mukil.* See כול in Glossary.

l. 87. *amel šalšu-kiššāti.* Id. *amel 3 Hu-Si.* Hu-Si = *kiššatu*, 'a group, company;' probably the name of a company of a certain number. Hence *amel 3 kiššāti* = 'man over three companies.' In II R. 31, 61 f *amel 3 šu amel 3 Hu-Si* occurs, which must mean *amel šalšu amel šalšu-kiššāti*, i. e. 'man over 3 captains of 3 companies = 'captain of 9 companies;' i. e. captain of three subalterns each of whom has three '*kiššatu*' under him; cf. centurion and decurion. Translate: 'captain of 3 companies.'

l. 101. *riḡim amelāti kibis alpāni ū šēni šisit alāla tābta uzumma ugārēšu.* The clamor of men, the tread of the feet of sheep and cattle, the sweet song of gladness, I made to depart from their fields. On genitive *alāla* for *alāli*, see Del., *Gram.*, 66. *alālu* for *elēlu* due first to change of first *ā* to *ē* under influence of the disappearing guttural ($\sqrt{\text{ḡḡ}}$), and then *ā* is deflected to *ē* upon the principle of vowel harmony. See Del., *Gram.*, 34 γ.

l. 109. *ašur lu simātīša.* A place not becoming her.

l. 112. *taiarat ilātīša tušadgibu pāwā-a.* She entrusted me with the restoration of her divine self.

l. 120. *ḥarrānu ša ulluṣ libbi.* A way causing the heart to rejoice. *ša* here is the sign of the genitive.

COL. VII.

l. 15. See *kīpallu*.

ll. 16-27. *šāt Nabu-bēl-šumē mār mār Marduk-apal-iddina ša iḥtā-iskā-ittaklu... amel mār šipri-ia šāt šēbul N'...u-ma'ir.* As regards N', grandson of M', who sinned, threw off my yoke, went to U', etc., my messenger I sent concerning the fetching of [this] N'.

l. 32. Cf. note on 4, 56.

l. 105. *rē'utsiṇa epēši.* To exercise rule over them.

l. 125. *ediššišu innabit.* See $\sqrt{\text{ḡN}}$ in Glossary.

COL. VIII.

l. 6. *tenšu.* See *tēmu* $\sqrt{\text{DN}}$.

l. 37. *ēkrulu šerē aḥamiš.* They ate each other's flesh.

COL. IX.

l. 37. *mē Pir-Šu.* Br. Syl. 7954, *Pir-Šu = ēribu ša šamši.* *mē ēribi šamši* = urine, 'water at the sunset.'

l. 48. *ina 1½ šikli ½ šikli kaspi išammu ina bab maḥiri.* They fix the price at 1½ to ½ shekel at the trading gate.

l. 50. *šutammu ina nidni amel urkātu-mu ina ḥabē amel zikaru kēru ina kišišu ša ukēn imdaharu gammalē u anēlāti.* The builder bought camels and men for his building, the water-carrier

for his vessels, the gardenier for his orchard which he had set out.

l. 66. *ina eli 7 minu mašēnikāti enikū.* [They] sucked at seven suckling mothers; see $\sqrt{\text{נָק}}$.

l. 83. *urassipa* for *urassiba*.

l. 101. *ikšassu* $\sqrt{\text{כָּשַׁן}}$.

l. 102. *urašša* $\sqrt{\text{רָחַשׁ}}$.

l. 110. *ša nārīb mašnukti ulnāti nabā zikīrša.* Whose name is called 'The entrance of the Throng of Nations.'

COL. X.

l. 30. *Ekur.* "Mountain house." Temple of Bēl; cf. the epithet of Bēl, 'šadu nabā' "The great mountain; cf. הַר הַבַּיִת in Micah iii. 12.

l. 32. *uṣupā* $\sqrt{\text{וּפָא}}$.

l. 39. *uṣazizu-inni* $\sqrt{\text{נָזַז}}$.

l. 45. *ištannappara belātu.* He sent acknowledgment of my royal power.

l. 47. He sent saying, "let there be peace to the king my lord."

l. 63. *mār šarrūti-ia iṣṣuru.* They guarded me while I was heir-apparent to the throne.

l. 71. *ina <maṣal> ša šēri.* Upon my bed in the morning. Cf. *šu ša šadādi*, *šu ša šilli.* *šu* with gen. in the sense of a descriptive gen. of material, time, etc.

l. 79. *tamlā šuatu.* As to the terrace; *casus pendens*.

l. 92. *dupšikku* is used here as a synonym of *allu*, 'basket,' evidently something used for carrying brick, mortar, etc. *Dup* = 'table,' *šikku*, a Semitic root meaning 'high,' hence 'a high board;' probably a flat mortar board carried on top of the head and supported on a stout framework of cane which fitted the head like a hood; then the name may have been given to the hood itself. Cf. a bas-relief of Ur-Nina, De Sarzec, *Déc.*, pl. 2 bis, and *KB.*, vol. III, pt. 2, p. 4, l. 55. A sign of slavery and equated with *kuḍurru*, V R. 32, 4.

l. 97. *uṣarriḫ ipšētēšu.* I enlarged its proportions.

l. 98. *šu gušārē šu erīni širāti tarbīt (רְבִיחַ) šadu Sisara šadu Libnana ušatriš elišu.* Tall cedar beams that grew on Mts. Sisara and Lebanon I reared upon it [i. e. upon the *tuphrubū*].

l. 105. *enbu ša muššudi mādīš.* (A great garden I planted) that it might bear fruit abundantly. **Muššudu**: Id. *Sa. Sa* i. e. piel of *Sa=māšadu*. Br. 7174 *muššudu*=Šu. Ur. Ur. [Ra]. Ur = pen of animals. Šu = du'uzu life producing [*Tummu*z]. Šu = also *membrum virile* [Erdman]. Ur. Ur intensive of Ur; Šu.Ur.Ur = produce in great numbers (of animals first and then in general for plants, etc.).

l. 108. *ina zarat takni-e.* In a panoply arranged with this inscription, "*ana arkat*, etc."

l. 111. *anbussu budīš.* See שׁוֹנִים in Glossary.

The Hymn to Bêlit, K. 257 (HT. 126-131).—By J. DYNELEY PRINCE, Professor in Columbia University, New York City.

THIS text, which is one of the most difficult of the Sumerian hymns, has, so far as I am aware, never been published before. Professor Haupt made his version of the inscription from a copy furnished him by Mr. Pinches, which Professor Haupt carefully compared with the original text written in Babylonian characters (see HT. 131). The version in HT. is given for the convenience of the student in Assyrian transliteration. The British Museum has several duplicates of K. 257; viz., K. 5122, K. 4968, and K. 4634 (see ZK. ii. 69). I regret that I have been unable to obtain copies of these texts, which might shed some additional light on the interpretation of the hymn. Similar texts are K. 2004 and the inscription published in *Cuneiform Texts from Babylonian Tablets in the British Museum*, Pt. xv, plates 24-25; see Pinches's remarks in PSBA., Nov. 12, '02, 307. The hymn reminds us also of Reisner's *Sumerian Hymns in the Berlin Museum* (in "Mitteil. aus d. oriental. Sammlungen," Teil 10, Berlin, 1896). The student should also compare Dr. Banks's Dissertation *Sumerisch-Babylonische Hymnen*, Leipzig, 1897.

The hymn K. 257 is important from two points of view. It presents a philologically interesting text in the *Eme-sal* dialect, whose existence and phonetic characteristics were first pointed out by Professor Haupt (*Nachr. d. kön. Ges. d. Wiss. zu Gött.*, 1880, 513-541 and HT. 133 ff.), and it affords a field for speculation with regard to its mythological concepts. Weissbach in his *Sumerische Frage*, 52 ff., however, mentions the names of some Assyriologists who suspected the presence of the *Eme-sal* dialect of Sumerian before Haupt definitely established the fact of its existence. In view of the peculiar character of this hymn and in spite of the difficulties under which I have labored because of my inability to procure copies of the duplicate texts, I venture to present a translation and philological exposition which may pave the way for future investigations in this inter-

esting field. I am indebted to Professor Haupt for valuable bibliographical material in connection with this inscription. Mr. S. H. Langdon has joined me during the past session at Columbia University in a special study of K. 257 and similar texts, and I owe to him several suggestions which have been duly mentioned in the following treatise.

It is now generally accepted that *Ene-sal* is the non-Semitic designation for a variation of the Sumerian language (cf. Hommel, *Semiten* i, 280; Weissbach, *op. cit.*, 175). These texts in variant form were called "Akkadian" by Hommel, Delitzsch, Zimmern, etc., and "Sumerian" by Haupt. It is unnecessary here to enter into the details of the Sumerian dialect question, which have been admirably set forth by Weissbach in his *Sum. Frage*, 55-61. The fact seems to be that in the non-Semitic texts *Ene-ku* means *Šumer*, i. e. Babylonia, another synonym for which is *Kīngi*, which is given as the equivalent of *Šumer* especially, and of "land" in general, as they naturally regarded *Šumer* as the land *par excellence* (Br. 9662.). This application of *Ene-ku* is now definitely established by Bezold's discovery of the fragment 81-7-27, 130 (ZA. iv. 434), i. e. *ene-ku=lišān Šu-me-ri* "the language of *Šumer*." There can be no doubt that *ku* in this combination was considered to be a distinctive designation, either racial or descriptive. This happy discovery makes it perfectly patent, moreover, that the Assyrians both knew and mentioned the Sumerian language. Owing to the undoubted distinction between *Ene-ku* and *Ene-sal*, I have used in this article the former term to denote the ordinary "classical" Sumerian (indicated by EK. and the *Ene-sal* by ES. in the following exposition). Weissbach (*op. cit.* 176/7), in order to connect the Assyrians' Sumerian language with the non-Semitic idiom which we know as Sumerian, points out that the word *Kīngi*, as already indicated above, is synonymous with *Šumer*. The inhabitants of *Kīngi*=*Šumer* were therefore "the Sumerians," and the language which belongs to *Kīngi* was "Sumerian." Since, then, this *Kīngi* always appears in the non-Semitic column of bilingual cuneiform inscriptions, we are justified in naming the idiom of this non-Semitic column "Sumerian." Thus far Weissbach.

Inasmuch as *ku* in the combination *Ene-ku=lišān Šu-me-ri* has evidently a distinctive sense, either racial or characteristic, we

may assume that *sal* in *Eme-sal* had a similar signification. The whole difficulty lies in the correct interpretation of *ku* and *sal*, for neither of which terms can we find a satisfactory racial or geographical sense. *Ku* has a number of more or less exalted Assyrian equivalents, such as *bêlu* "lord," Br. 10525 (cf. also Br. 10535="the god Marduk"); *rubû* "prince," Br. 10547 *passim*, (cf. *ku*="the god Sin," Br. 10549); secondary meanings are *tamû* "to adjure," Br. 10555; *tašrîtu* "dedication," Br. 10556, and *ţemû* "counsel, wise speech," Br. 10557. The most characteristic meanings of *sal*, on the other hand, are "woman" *zinnîštu*, Br. 10920, and *uru* "*puellendum muliere*," Br. 10919 and 10927 (*sal-lu=galla, mug, sal*). Are we then to assume that *Eme-sal* was a speech peculiar to women as distinct from *Eme-ku*, the language of the lords, or princes, or the speech of wise counsel, i. e. the language of the higher laws and religion? The *Eme-sal* texts are many of them devout hymns like K. 257, showing a high religious tone. Why should these have been in the "women's language," as Haupt names the *Eme-sal*, *Sintfluthbericht* 22f.? It is, of course, possible to cite parallels for a "women's tongue" among other peoples. Thus, the Carib women of the Antilles used a different language from that of their husbands, while the Eskimo women of Greenland to this day have certain distinctive pronunciations (cf. Sayce, *Introd. to the Science of Language*, i. 205). In spite of this fact, however, we find no allusions in the Assyro-Babylonian inscriptions to such a state of affairs, which could only arise among very primitive peoples accustomed to long hunting trips, during which the women were necessarily separated from the men for months at a time. We must suppose that so soon as a higher civilization prevailed, as was the case in the very earliest days in the Euphrates valley, such a sexual speech-differentiation would disappear within a single generation. On this account I cannot think that the sex of the original speakers of *Eme-ku* and *Eme-sal* had anything to do with the nomenclature of these idioms.

It is much more probable that *Eme-ku* "language of the lords" or "princes" or "language of counsel," and *Eme-sal* "tongue of the women" were applied to the respective speech-forms in a purely metaphorical sense at a comparatively late date. I suggest that *Eme-ku* "the noble tongue" was so

called owing to its stronger system of phonetics, and that *Eme-sal* "the womanly speech" simply alluded to the softer intonations of this dialect, which, for example, avoided the hard *g*-sound as much as possible, changing it to *m*, *b* and *d*. The *Eme-sal* also preferred theumlaut *ê* to *u*, changed *z* to *š*, *s* to *z*, and *n* to *l*, etc. (see Haupt's masterly treatment of this subject, HT. 134, 2.). It was no doubt owing to its phonetic softness that the ES. dialect seemed to the early Babylonian scribes especially suitable for penitential hymns.

In the meantime, until further light comes to us from the monuments, I fully concur with Weissbach, *op. cit.*, p. 177, that the dialectic non-Semitic *Eme-sal* should simply bear this name and not any term which commits us to a definite theory. Any tribal or geographical distinction between *Eme-ku* and *Eme-sal* has yet to be discovered. The equation *Eme-ku* = *lišān Šumeri* "the language of Šumer" or Babylonia, does not imply that *Eme-sal* was not also spoken in *Šumer*!

At first sight the subject matter of K. 257 would seem to indicate that the goddess *Bēlit*, to whose praise the hymn is devoted, was a bi-sexual deity. In 22-24 obv., she is made to exclaim: "I am *Bēl* (*Enlillā*) and *Bēlit* (*Ninlillā*)." So the Assyrian line 24, which seems to me to give the correct translation of the Sum. in 22 (see Commentary on this passage). Professor Barton in the JBL. xx. pp. 23/4 gives two examples of what might be regarded as parallel cases; that of the west Semitic deities *Melek-Astart* and *Eshmun-Astart*, whom he considers to be composite gods of both sexes. On the other hand, a closer examination of K. 257 shows that such a supposition with regard to our inscription is unnecessary, as our goddess is simply claiming universality. She calls herself in this hymn the daughter of *Bēl*, 20 and 72 obv., the daughter of *Sin*, 73/4 obv. and the consort of *Ea*, 75 obv., although *Bēlit* is usually known as the consort of *Bēl* (see below and Jastrow, *Religion*, 226). There can be little doubt that there was no fixed mythological conception regarding the relation of *Bēlit* to the pantheon, as the Assyrians also knew her, both as the wife of their peculiar god *Ašur*, and as the mate of *Ea*, as whose spouse she is mentioned in our hymn (cf. Sarg. Cyl. 48 and the parallel, Lyon, *Sargontexte*, p. 71). She was also called by the Assyrians *bēlit ilāni* "the mistress of the gods" (so also in K. 257,

12/13, obv.). A great deal of the confusion with regard to *Bēlit* no doubt arose from the fact that *bēltu* meant "lady," and hence was applicable to any goddess.

By far the most curious part of our inscription are the passages describing the destructive power of *Bēlit*, 25-34 obv. She is evidently at war with and conquers other gods "of the mountain," 45/6 obv., i. e. of the Babylonian universe, and it is distinctly stated, 57/8 obv., that she makes war in heaven. In the reverse 11-22, the same idea is expressed that she is the all-powerful destructive influence who not only overthrows the gods, but also rebellious humanity. From 1 obv.-22 rev. the whole tone of the hymn is that of a song of praise to a warrior goddess. The lines 23-30 rev., which allude to metals, are too mutilated to interpret consecutively, but they seem to imply her power over the inanimate world as well, no doubt in her capacity as a fire deity, as she is expressly stated to be in 11/12 rev.

From 31-72 rev., another phase of *Bēlit's* power is treated, although unfortunately in a very fragmentary text. Here the goddess undoubtedly appears as the patroness of sexual intercourse and parturition. The allusions to "the girl" (31/2) and "the man" (33/4), and to "the man and the woman" (47/54 rev.), taken in connection with the significant expressions "to open the house" (55/6 rev.), and "not to open the house" (57/8 rev.), and "the virgin" (?) in 59/60, show very plainly the general sense of this part of the hymn. *Bēlit* controls the personal attraction of one sex to the other; she presides at the opening of the house, i. e. the act of copulation; she brings forth "the strength out of the house," 61/2 rev., viz., the *semen hominis* and "as the (divine) wife" regulates the passions of the male (67-70 rev.). Finally, 72-73 rev., she ordains the time of birth for the expectant mother.

There can be no doubt as to the composite character of the goddess of this hymn. She is the old *Bēlit* of the earlier Babylonian conceptions, as may be seen from her association with "the mountain." The Babylonian *Bēlit* or *Ninlillá* was called *Ninṣar-sag* "lady of the mountain," because *Bēl*, her husband, as the chief of the gods, was especially associated with this "mountain of the lands" (see Jastrow, *op. cit.* 55/6). The goddess of our inscription is not only this *Bēlit*, but also *Ištar*

in her double personality of the goddess of battle and the goddess of sexual love. This fact is emphasized by her calling herself "the daughter of *Sin*," who was the father of the real *Ištar*. The warlike *Ištar* is not an Assyrian concept, but goes back as far as the time of *Hammurābi* (KB. iii. 1, 113). *Ištar* in the *Gilgamesh*-Epic, as is well known, is a raging deity who smites her foes with plagues. The destructive characteristics of our *Bēlit*, set forth 11 ff. rev., are precisely those of the *Ištar* of the *Gilgamesh*-Epic. *Ištar* was, of course, the mother of all mankind and the goddess of sexual love and parturition. I might add also that *Bēlit* in this inscription assumes to herself the attributes of *Gibil*, the fire-god; cf. 11 ff. rev.

Here we must note a very important point. In one Assyrian passage, Rassam Cyl. B. col. v., 17, *Ištar* is called the daughter of *Bēl*, and Jastrow (*Religion*, 205, n. 3) thinks that this must be a textual error. But this statement is characteristic of our present inscription, as I have mentioned already. The four times repeated assertion of K. 257 that *Nin-lil* is the "daughter of *Bēl*," 14/5; 18/9; 71/2; 73/4 obv., shows definitely that this idea must have been one of the variant conceptions, although not a usual one, regarding the parentage of this goddess, and moreover confirms the parallel in the Rassam Cylinder just cited.

The confusion of the original Babylonian *Bēlit* with *Ištar* is well known and need excite little remark (see Jastrow, *Rel.*, 226 ff.). The most extraordinary feature of the hymn, K. 257, is the warfare of the goddess *Bēlit* with "the gods of the mountain," 43 obv. I can find no parallel for this statement in the other cuneiform literature except in the tales of the early cosmology, where the feminine *Tiāmat* fights unsuccessfully with the great gods under *Bēl-Marduk*. I am therefore inclined to think that the rebellious "goddess of the water," 53/4 obv., whom *Bēlit* subdues may be a confused later allusion to the *Tiāmat*-myth (?). The goddess's statement, 37/8 obv., that she "washes her hands at the mountain spring of *Dilmun*," probably an island near Bahrein in the Persian Gulf, serves still further to establish her connection with southern Babylonia.

To sum up, we should note the following points in this connection. 1. We have here a composite deity. The old Babylonian *Bēlit*, associated with the Persian Gulf, fights with

certain gods of the mountain, which is perhaps here a reference to the abode of the primitive chaotic deities who sided with *Tāmat*, although such a usage is surprising. This is clearly a case of absorption by the feminine *Bēlit* of the chief characteristics of *Bēl-Marduk*! This *Bēlit* is also *Ištar* in both her forms as shown above and the fire-god *Gibil*. 2. The inscription was perhaps of Assyrian origin, judging from the fact that *Bēlit* is called the daughter of *Bēl*, a genealogical assertion which appears, so far as I am aware, only in the Rassam Cylinder cited above. On the other hand, this genealogy of *Bēlit* may have been of Babylonian origin.

Finally, the universal characteristics and dominion claimed by our *Bēlit* are worthy of attention. She is not only *Bēlit*, but also *Bēl*. She is not only the daughter of *Bēl*, but also of *Sin*, 73/4 obv., and the consort of *Ea*, 75/6 obv. She is destructive and at the same time productive. She is the flaming fire of death and the fosterer of love and birth. Nowhere do we find a better example than here of henotheism merging into monotheism. The inscription is worthy to stand among the best efforts of the ancient Assyro-Babylonian hymnologists.

III. p. 126. Nr. 21 (K. 257).

OVERSE.

1. *be-lit*
2. me-(e-nu-mên)
3. (*be-il-*) *tum* (*ul ana-ku-u*)
4. me-(e-nu-mên)
5. (*be-il-*) *tum* (*ul ana-ku-u*)
6. me-e-(nu-mên)
7. (*ru-*)*ba-tum* (*ul ana-ku-u*)
8. me-e-nu-(mên)
9. *ru-ba-tum* (*ul ana-ku-u*)
10. me-e-nu-(mên)
11. *be-il-tum* *lu* (*ul ana-ku-u*)
12. (dim-)me-ir-e-ne me-e-nu-(mên umun-e-ne)
13. (*ilāni ul ana-ku-u*) *be-lit*-(*šu-nu*).
14. (me-e-nu-)mên *tu-mu* ^{dimmer} *Mu-ul-lil-lá*
15. *ul ana-ku-u mar-ti lu* ¶¶.
16. umun-mên me-nu-mên me-e *tu-mu-sag*

17. *be-ili-ku ul ana-ku-u ana-ku qar-ra-(du).*
18. *umun-an-na-mên me-e-nu-mên tu-mu ur-sag dimmêr Mu-ul-(lil-lá)*
19. *iš-ta-ri-tum ul ana-ku-u mar-tum qa-rit-tum ū ʔ ana-ku.*
20. *tu-mu mug (?) -sag-gá dimmêr Mu-ul-lil-lá*
21. *mar-tum a-ša-rit-tum ša ū ʔ ana-ku.*
22. *dimmêr En-lil-lá-mên dimmêr Nin-lil-lá*
23. *ū En-lil ana-ku ša ū Nin-lil.*
24. *(ū En-lil-ku) u ū Nin-lil.*
25. *a lá-lá-a-mu nu-si-gi*
26. *me-e ul-ál-wu ul i-zak-ku-u.*
27. *bíl él-la-mu nu-te-en*
28. *i-ša-tu uš-taw-wa-zu ul i-bi-el-li*
29. *é-an-na é-ki-a šu-mu-ta-ni (in-si-si)*
30. *É-a-a-ak-e-dimmêr-ti ana qa-ti-ia u-ma-al-(li).*
31. *êri êr-ra-mu sag an-ku nu-el*
32. *a-li aš-tal-lum ri-is-su ul in-na-aš-(ši)*
33. *e-ne-am-max dug-ga-mu ki-bal-a-ni gál*
34. *a-mat ki-bi-ti-ia gir-tum mât nu-kur-tum qa-tum u-ab-bat.*
35. *tulbur kur-ra-kit im-gé-nu im-mi-mêr*
36. *ina bur-ti ša-di-i qa-du-tu am-wu-wa.*
37. *tulbur kur ni-tuk-ki-ka sag-ga a-ba-ni-in-(lax)*
38. *ina bur-ti ša-di-i Dil-mun qa-qa-du am-si.*
39. ⁱ *e-gi-zag-ga-ka zag sal ú-ba-ni-in-(dug-ga)*
40. *ina i-gi-za-an-gi-e uk-ta-an-ni.*
41. *umun-mên šab-šab-ba gu (ka) ú-ba-ni-in-(dê)*
42. *be-ili-ku ina qab-hu a-ša-as-si-ma.*
43. *šab kur-ra-kit gu(ka) u-ba-ni-in-(dê)*
44. *ina qa-bal ša-di-i a-(ša-as-si-ma).*
45. *dim-me-ir kur-ra ni-gíl-li-ag-gi*
46. *ilāni ša ša-di-i it-ta-na-am-gi-ri-(u)*
47. *xar-ra-an kur-ra dim-me-ir kur-ra i-de-mu-ku in-dib-bi*
48. *ina u-ru-wa ša-di-i ilāni ša ša-di-i ana ma-w-ri-ia i-ba-(u).*
49. *bar-bara-ga-(e)-ne mu-un-da-ab-síg-síg-gi*
50. *a-šib pa-rak-ki i-ru-bu-u-ni; i-xi-šu-ni; i-nar-ru-du-nim-(ma).*
51. *bar-bara-()-uš aš-a-an mu-un-da-láx-láx-e*
52. *a-šib pa-rak-ki kib-sa iš-ten i-ri-id-du-ni; ša-(xu-tu) ?*
53. *mulu lul ni-me a mu-un-na-ab-bi-e*

54. *ša sar-rat mi i-qaḫ-bi-ni.*
 55. *umun-mên mu-lu lul-lā é-a mi-ni-ib-tu-(ri)*
 56. *be-li-ku sa-ar-tu ana bīti u-še-ir-ri-ib.*
 57. *šu-él-la-mu an-na ba-na-ab-e-(UŠ=TIL) . . .*
 58. *nī-iš qa-ti-ia šam-e e-miḫ e-mu-qa-a-a ša-qa-tu šam-e im-
da-(a-gu).*
 59. *umun-mên šu-mu-ta šu di-a nu-ma-(al)*
 60. *be-ili-ku it-ti qa-ti-ia qātu ša iš-ša-an-na-nu ul i-ba-aš-ši.*
 61. *me-ri ḫ-la-mu ki-a ba-e-til*
 62. *(tal-lak-tum) ša-qu-tum ir-gi-ti gam-rat.*
 63. *umun-mên (me-ri)-mu-ta me-ri di-a nu-ma-al*
 64. *be-ili-ku it-ti še-pi-ia še-pu ša iš-ša-an-(nu-na) ul i-ba-aš-ši.*
 65. *i-de-mu-ka a-ba-a-an bar-mu-ku a-ba-a-an*
 66. *ina pa-ni-ia man-nu ina ar-ki-ia ma-an-nu.*
 67. *(idē)-ku ḫ-la-(mu) a-ba ba-ra-(ē)*
 68. *ina nī-iš i-ni-ia man-nu uḡ-gu*
 69. *(in-)du-mu a-ba ba-ra-šub-bu*
 70. *ina (pi-it pu-)ri-di-ia man-nu ip-pu-raš-šid.*
 71. *ṭumu-max di-da dimmēr Mu-ul-lil-lā me-en*
 72. *mar-tum (ḡir-tum di-ni) ša ū ana-ku.*
 73. *gal-(di) a-a-mu dimmēr En-zu-na me-en*
 74. *ti-iz-(gar)-tum a-bi-ia ū Sin ana-ku.*
 75. *umun-mên sal-dug-ga dimmēr Nu-dim-mud-da me-en*
 76. *be-ili-ku (tak-)nit ū ana-ku.*
 77. *xi-bi-eš-šu el ū mu-un-ḫ-la.*
 78. *(e-na) a-na-aš-si (la-bi-)ra a-na-aš-ši.*

REVERSE.

1. *(lugal-)ra ḫ-la-mu-un-na-ab-ḫ-la*
 2. *šar-ra a-tu-a u-ša-aš-ši.*
 3. *siba-ra-mu-mên xi-bi mu-un-na-ab-ši-ám-má*
 4. *xi-bi-eš-šu a-nam-din.*
 5. *sa-a i-de-mên sa-a a-ba-mên*
 6. *li-max-ru ana-ku li ar-ku ana-ku.*
 7. *umun-mên sa-par-max xi-bi lil-lā šu-ru-na-mên*
 8. *be-ili-ku (sa-par-)ra ḡi-i-ri ina ḡi-e-ri za-ḡi-ḡi šur-bu-ḡa-at
ana-ku.*
 9. *sa-(par ḡil-)li an-na-(edīn-na) xi-bi . . . -lá mên.*
 10. *(šētu it-ḡur-)tum ša ina ḡi-rim xi-bi-eš-šu . . . -at ana-ku.*
 11. *bīl sar-sar-da ḫ xi-bi-eš-šu lá mên*

12. *i-ša-tum na-pi-iš-tum šit-bu-tum ana-ku.*
13. *bíl sar-sar-da kur-ra-ga ba-sig-kab-du-ga mên*
14. *i-ša-tum na-pi-iš-tum ša ina ki-riš šad-i iš-ša-ra-pu ana-ku.*
15. *ú-bu-bu te-tal-la ki-bal-a šek-má-mên*
16. *ša nap-lu-šu mut-tab-ri-tum ana mât nu-kur-ti iz-za-nu-ma ana-ku.*
17. *šul ka-tar-ra-ra ka-a-šu ne-mên*
18. *ša iê-lu mul-ê-lu-mu pa-si-sat pi-šu ana-ku.*
19. *me-ri-an-šu-êl-la ki-a dib-êl-bi mên*
20. *ša tal-luk-ta-šu ša-qa-tum mu-qaš-si-iš-su ana-ku.*
21. *gaba-úr-ga-()-ra xarran nu-ši-ám-má*
22. *(ša) xa-mi-în i-ra-a-tum ur-xa ul a-nam-(din).*
23. *ám-u mên ám-má zabar-ra*
24. *-šu a-na-ku ana-ku a-na-ak si-par-ri*
25. *-par-ku ša-qu-tum ana-ku ša-qu-tum na-mir-(tum)*
ana-ku.
26. *mên am-u mên lu-má-đú-đú*
27. *(umun-)an-na mên am-u mên* *đú-đú*
28. *ú iš-ta-ri-tum ana-ku* *ri-ib.*
29. *ám-u zabar-ra*
30. *a-na-ak si-par-ri ša ana*
31. *gí-in-bi ú-um-tag-ga*
32. *am-tu a-la-ap-pat-ma am-tu u*
33. *mu-lu-bi ú-um-tag-ga*
34. *a-me-lu a-lap-pat-ma a-(me-lu)*
35. *é mu-un-tu-ri-en-na-mu (é mulu gi-ib-mar)*
36. *bíti e-ter-bu bit a-mi-li e-đu-(ab)*
37. *mu-lu a-an (da?) mar-en-na-mu*
38. *a-mi-el iš-ti-šu-šu; iš-taš*
39. *i-de-ku al-dim*
40. *ina max-ri al-luk-ma*
41. *a-ba-ku al-di-di*
42. *ar-ki al-luk-ma mu-da-*
43. *zi-da kab-bu-ku ni-*
44. *im-na ana šu-(me-li)*
45. *kab-bu zi-da-ku ni-*
46. *šu-me-(li) (ana) im-ni*
47. *mu-tin 𐎶𐎵 -mu-(tin)-a-ku mu-ni-*
48. *zi-ka-ri (ana) zin-niš-tum*

49. nu- 𐎢𐎵 -mu-tin-a-ku nu-ni-
 50. zin-niš-tum ana zi-(ka)-ri . . .
 51. mu-tin nu- 𐎢𐎵 -a-ku se-ir-ka . . .
 52. ša zi-ka-ri ana zin-niš-tum . . .
 53. nu- 𐎢𐎵 -mu-tin-a-ku se-ir-ka . . .
 54. zin-niš-tum ana zi-ka-ri . . .
 55. e-ma (gúl)-la é xi-bi
 56. (bītu) pi-ti-i
 57. é nu-ma-(gal)-la sar-da-
 58. bītu lu pi-ti-i
 59. dim-me ma-má-a
 60. u-diš-ti
 61. xi-bi-eš -ši é-ta im-ta-an-(é)
 62. e-muq-tum iš-tu hi-ít u-še-iç-ça-(a)
 63. me-e dam-dam-ta mu-un-na-ab-
 64. ana-ku aš-ša-tu
 65. umun-mên tumu ama-da mu-un-na-ab-
 66. be-ili-ku mar-ti it-ti um-mi-šu du-ga-
 67. gud-gud-du GIŠ-I?-BI . . .
 68. ša u-ru e-lu-ti . . .
 69. . . . -da BAD-?-BI . . .
 70. ša u-ru šap-lu-(ti)
 71. . . . ŠU-LU-ŠU-AN
 72. sa par-ri-is-ku ar-(ka lu i-ši [?])
 73. ú-bi ama sux-a-bi (ka mu-un-na-ab-dé[?])

TRANSLATION.

OBVERSE.

1. the lady of
 2/3. (am I not the lady?)
 4/5. (am I not the lady?)
 6/7. (am I not the great one?)
 8/9. (am I not) the great one?
 10/11. the lady, the god (am I not?)
 12/13. (of the) gods am I not (their lady?)
 14/15. Am I not the daughter of Bêl?
 16/17. I am supreme, am I not? I am the warrior (masc.).
 18/19. Am I not the goddess? The war-like daughter of
 Bêl am I.

- 20/21. The high-placed daughter of *Bel* am I.
 22. I am *En-lil-lá*, *Nin-lil-lá*,
 23. (I am *En-lil*) of *Nin-lil*.
 24. (I am *En-lil*) and *Nin-lil*.
 25/26. The waters which I stir up do not become clear.
 27/28. The fire which I kindle does not go out.
 29/30. The House of Heaven, the House of Earth, unto my hand he has entrusted.
 31/32. The city which I plunder is not restored.
 33/34. The utterance of my exalted command destroys the land of the foe. (Assyr. At the utterance . . . [my] hand destroys, etc.).
 35/36. At the mountain spring I fill the vessel.
 37/38. At the mountain spring of Dilmun I wash (my) head.
 39/40. By the *igizangi* stone I am guarded.
 41/42. I am supreme. In the midst I shout my war-cry;
 43/44. In the midst of the mountain I shout my war-cry.
 45/46. The gods of the mountain are hostilely inclined.
 47/48. On the road of the mountain, the gods of the mountain approach me with hostile intent.
 49/50. The royal beings (dwellers in palaces) enter before me: hasten unto me: they afflict me.
 51/52. The dwellers in the palaces with one accord come down unto me.
 53/54. The rebellious goddess of the water shouts at me.
 55/56. I am supreme. I will cause the rebellious goddess to enter the house.
 57/58. I establish the lifting up of my hands to heaven; my exalted powers make war in heaven.
 59/60. I am supreme. The hand of him who vies with me shall not stand with my hand.
 61/62. My mighty pace fills the earth.
 63/64. I am supreme. The foot of him who vies with me shall not stand with my foot.
 65/66. Who is there before me? Who is there behind me?
 67/68. From the lifting up of mine eyes who can escape?
 69/70. From the rush of my onslaught who can flee?
 71/72. The exalted daughter of the judgment of *Bēl* I am.
 73/74. The noble heroine of my father *Sin* I am.
 75/76. I am supreme. The duly appointed spouse (?) of *Ea* I am.

77/78. Him who is bowed down I lift up; the aged one I lift up.

REVERSE.

1/2. Verily, I will raise up the king.

3/4. To my shepherd I will give.

5/6. Verily, I am before; verily, I am behind.

7/8. I am supreme. An exalted net spread out in the wilderness (field of the storm-wind) I am.

9/10. ? ? ? which in the field (is spread) I am.

11/12. A glowing fire flaming forth I am.

13/14. A glowing fire which burns in the midst of the mountains I am.

15/16. I am the one who, full to overflowing with its flame, rains down on the foeman's land.

17/18. The one who makes as naught the speech of the humbled warrior I am.

19/20. The one who cuts off him whose way is haughty in the land I am.

21/22. To those who store up proud thoughts (?) I give not the way (do not permit to advance with impunity).

23/24. . . . lead I am. Lead alloyed with copper (I am).

25. The lofty I am. The lofty one, the glowing one I am.

26. Lead I am. The maker (?) of (I am).

27/28. I am the goddess who

29/30. Lead alloyed with copper, which unto

31/32. The girl I disturb, the girl and

33/34. The man I disturb, the (man)

35/36. The house which I enter, the house of the man I trouble.

37/38. the man who ? ? ? ?

39/40. I will go before

41/42. I will go behind

43/44. Right to left

45/46. Left to right

47/48. The man unto the woman

49/50. The woman unto the man

51/52. That which the man unto the woman

53/54. The woman unto the man

- 55/56. To open the house
 57. Not to open the house
 59/60. The virgin (?)
 61/62. The strength out of the house I bring forth.
 63/64. I as the wife
 65/66. I am supreme. The daughter with her mother I
 67/68. The one who the erect member
 69/70. The one who the low member
 71/72. That which I have planned (in future shall come to pass).
 73. On that day (?) to the mother I foretell her time
 (i. e. of her bearing).

COMMENTARY.

·OBVERSE.

I have supplied the first fourteen lines from the context of the subsequent text.

14/15. *U' anakū* with interrogative final *-u* is a question "am I not?"; cf. Delitzsch, *Gr.* § 79 γ; Hommel,¹ *Semiten*, p. 505 *ad* p. 95; IAS., p. xxxix, B. *dimmēr* *Mullillā*, clearly an assimilation for *Mullillā* which is the well known ES. form for EK. *dmgr* *Enlillā*=*bu* *Bēl*. *Enlillā* was evidently pronounced *Illilla*, as is clear from V. 37, 21a and Damasc. *Ἰλλίλος* (cf. Zb. 19).

16. *Umun*, ES. for *ugun*, V. 37, 34 abc; *u-gu-nu*=*bēltu*. ES. *m* frequently appears for EK. *g*; cf. *gāl* (IK)=ES. *ma-al* "to be;" EK. *garzu*=ES. *marza* "command" (HT. 134, § 2). There can be no doubt that DU here is a form of writing *mēn*, the element of the verb "to be." In Sc. 284, we find *gi-in*=DU=*a-na-ku*, which would seem to indicate the *g* pronunciation for this sign DU; but since ES. frequently avoids the *g*-sound (HT. 134 § 2), it is highly probable that DU in an ES. text must have had the value *mēn*=*gin*, Sc. 284; especially as *me-en* occurs in our text, 71, 73, 75 obv.=*anāku*. Haupt has already pointed out that *mēn* is not necessarily the first person and the same is undoubtedly true of DU=*gin*, *mēn*; cf. AL.³ 135, 11/12: DU=*atti* "thou" (fem.). DU=*gin* and *mēn* may be used for all three persons indiscriminately, the distinctive signs of the

¹ Also p. 507 *ad* p. 292.

first and second persons *mê* and *zê* respectively, or the noun suffixes *-mu* "my," *-zu* "thy," being always given, as in AL.³ 135, 1-5 obv. In the case of our present inscription it may be supposed that a distinctive first personal sign occurred in one of the earlier mutilated lines of the obverse. In *me-mu-mê*, we have a repetition of the stem *me* "to be" which must be the equivalent of the interrogative *-u* in Assyrian.

17. The neg. *-nu* is infixed as in EK. *giš-nu-nu-tuk=ul išmê* "he heard not," V. 24, 38a *et passim*. *Me-e* stands for *andku*, but it may also be second person, cf. Sfg. 22 *adlânu nuncat=ul abi attu*. In DL.³ p. 91, B, *ki-me-tu=ittini* "with us." On *me=me-en*, cf. also ZA. i. 192 and Hommel, *Semiten*, 470, 175.

17. *Bêliku* is a permansive "I am supreme," applicable to either gender. That *nî=îli* is seen Sfg. 61, n. 5. Cf. s. v. 56 obv. *Qurra(lu)* masc. is unusual as applied to a goddess; cf. 19 obv. *qurittum* and s. v. 22-24 obv.

19. For *îstârîtu*, without the god-sign, cf. AL.³ 134, *Ištar-Psaln*, obv. 4. In 27 rev. the word is written with *ilu*. *Qurittum* here is properly feminine; cf. Hwb. 595b.

20. *Mug(?)=sag-gu* for *ašârîtu* is probably an error. The EK. ideogram is *sag-kaš*, *passim*. In ES. we find *i-de-eš-du*, Nbk. ii. 2=*ašârîdu*. In *mug(?)=sag-gu*, *sag-gu* is no doubt a variant of *zag=asârîdu*, 39, obv. q. v.

22-24. These lines are excessively difficult. The Sum. seems to mean "I am Bêl (and) Bêlit", although the copula is unexpressed. I believe that the Assyr. lines 23-24 are tentative translations on the part of the scribe. L. 23 "I am Bêl of Bêlit" makes apparently no sense. L. 24, however, of which the first part is supplied, probably gives the true rendering (see above Introduction). In 24 *Enlil-ku*, we seem to have an Assyr. perm. form as in *bêliku*, 17. The copula *u* here is perfectly clear.

25. In *bâ-bû-u-mu*, the *-mu* is not necessarily the sign of the first person, although here the context demands the first person. This *-mu* is the sign of the relative clause in Sum. probably indicating all three persons. Cf. IV. 30, 4a: *ursaggal kigim siggânu=qurrâdu rabû ša kûnu irgîtim retû* "the hero who is as firmly fixed as the earth." Cf. also IV. 27, nr. 1, 4-11, where we find a succession of *-mu* clauses all third person relative. A similar case is seen in HT. 122, obv. 16: *êrizuku*

aggiggyá akāmu=*ana ardiki ša marušum ibšu* "unto thy (fem.) servant who has sickness. "It is evident, however, that this *-nu* can indicate the first person also, as may be seen from the line under discussion as well as from 27-28 obv.: *bil ellānu* "the fire which I kindle;" *ēri ērrānu* "the city which I plunder." This relative participial construction reminds us of Turkish; as *bu gördüğün kitab dır* "this is the book which I saw." In the Turkic tongues, however, the persons are carefully distinguished by suffixes in these relative participles. Like the Chinese dialects, the Sumerian was lacking in this matter of distinction of the persons, a peculiarity which I hope to discuss in another article (in *AJSL.*, July, 1903, pp. 205 f.).

26. In *addalzu* the relative force is expressed by the overhanging vowel *-u*, as in 28; 30; 32 obv. (*-um* in 32 obv.).

27/28. The root *el* really means "lift up," i. e. "raise a fire." With *te-en*=*babā*, cf. Hammurab. Biling. 9/10; *tenten*=*bullā* "to extinguish"; *bil tēntēn*=*kabāsu ša išāti* "tread down, extinguish, said of fire," II. 27, 48g. *Tēntēn* also means *pašānu* "soothe, pacify," II. 26, 19c. There seems to be an intentional assonance in *bil ellānu* and in the following *ēri ērrānu*. L. 28 is cited Zb. 26, 5; cf. ZK. i. 313, n. 2.

29. *Šumutani* "in my hand." Here for the first time we have an unmistakable first personal suffix; i. e. *-nu*. The suffixes *-tu* and *-ni* here have both of them postpositional force=Assyr. *ina*; cf. IV. 25, 40 a: *ki-azag-ga-ni-ku*=*ana ašur tēlilti*; ib. 42a: *ki-ēl-la-a-ni*=*ana ašur tēlilti* "unto a pure place," where *-ni* is equivalent to *ana*. I supply *in-si-si*=*umalli* (cf. Hwb. 410).

30. There is an unusual difference between this passage and the text of 29 obv. In 29, *ē-an-na ē-ki-a* can only mean "the house of heaven (and) the house of earth," i. e. the entire universe as understood by the Babylonians. In *ē-a-a-ak-e-āim-mēr-ti*, 30, the combination *a-ak* must be a scribal error for *id*=*nāru* "river," Br. 11647. The whole probably means "the house of the water of the river, the house of the god of life" (*ti*=*balātu*, Br. 1647). This expression is unique here. It is really an inversion of the expression in 29, i. e. "the house of heaven," 29="the house of the god of life," 30, and "the house of earth," 29="the house of the water of the river," 30. It is perfectly evident that the Assyr. scribe regarded the expression in 30 as being synonymous with that in 29.

31. *Êri* seems to be ES. for EK. *âru=âlu*; cf. Sa. 3, 11 and Sfg. 61, n. 4. *Êr* is ES. for *šalâlu*, Br. 5388. The usual EK. form is *law*, Br. 4948. DU (*tum*) also=*šalâlu*, Br. 4948 in EK. Note that the Sum. line here has *an-ku* "unto heaven," which is not represented in Assyr. by *ana šamê*. In *aštallum*, the overhanging relative vowel is *-um* instead of *-u*; cf. on 26 obv.

33/4. *E-ne-âm=amâtû* in a number of passages, cited Br. 5871. It is undoubtedly a dialectic writing for *ka=inim* (EK.) as pointed out in ZA. i. 9. The extraordinary and unnecessary *qâtum* "(my) hand" of 34 is not represented in the Sum. text.

35/6. The value *tulbur* for this sign is found II. 32, 16g; cf. Zb. 105. It has also the value *pu*; see LTP. nr. 211 and for *bâru*, cf. *ib*. 169, n. i. The fem. *bârtu* in 36 is an unusual form for *bâru* "well"=Sum. *tulbur*, *pu*. I am forced to read *-nu* as a component part of *im-gé=qadâtû* "an earthen vessel;" cf. V. 32, 26a; *im-gé(gu)=qa-du-tum=îûu* "clay," not *didu*, as Br. 8401; also V. 27, 7a. *Nu* in our passages may mean *galnu* "black," Br. 1963, but this is doubtful. For the ES. value *ge* (EK. *gu*), cf. Sfg. 51. *Mêr*, ES. for *gîr=maxânu* only here. For *im-mî*, first person, cf. IV. 6, 45b: *im-min-ri=armêma*. The prefix *im-*, like a number of other Sum. verb prefixes, may indicate all three persons indiscriminately.

37/8. *Tulbur kur Nîtukkîku* "at the mountain spring of Dilmun" (*-ka* here=*ina*): cf. 39 and 65 obv. (also Br. 551). It is probable that *-ka* here serves the double purpose of the postposition and of the genitive case. It is evidently cognitive with *-ku*, *-kit*, the latter probably to be read *ke*, or *ge*. *Ka* also indicates the genitive relation in archaic Sumerian. I supply *law=misû* "wash," Sb. 76. *A-ba* is unusual in an indicative sense; cf. only Br. 6331: *aba-nîb-gîgi-eš=uttirru* and Br. 3571: *sagsar aba-šin-na-ak=ittâ'idma*. It may appear as an imper. of the second or third person; cf. *aba-nîn-sar=rukusma*, Br. 4331; *aba-nîn-gub=lizziz*, HT. 98, 49. In these latter cases, however, it is probably a variant of the optat. *xaba*. *Aba*- usually means *mannu* "who?" See below 69/70 obv.

39/40. *egizayga=igizangu*, found only here, may mean "the stone (*i*) of the pen (*gi*) of fate" (*zangu=zag=pîrištu*, V. 29; 73a). *Zag* here must mean *ašârittu*, fem. of *ašâridû* "first in rank," although it is not expressed in Assyrian. *Zag=ašâridû*, V. 29, 64a. The *-ka* in *egizayga-ka=ina*, as in 37 obv. The

allusion may be to some sacred written tablet, but the meaning is very obscure. *Uktanni* must be Iftaal of $\sqrt{\text{נה}}$, as is evident from *sal*, which must be part of the following verb, i. e. *sal-dug-ga*, II. 35, 45c. *Kunnū* means "guard, preserve;" cf. Br. 533. Our own inscription 75 obv. has the same combination *taknūtu*.

41/2. *Šab-šab-ba=gablu* "midst" only here in reduplicated form; cf. on 43, obv. *Qablu* in this passage cannot mean "battle," as it is probably a variant for *šá-ba=libbu*, IV. 11, 15b; 20, 5. Cf. 43 obv. *Gu(ku)-lē* is well known for *šusa*. This line is merely a poetical prolepsis of 43 obv. as in the case with 45/6 obv.

43/4. Here the meaning of *šab* is perfectly clear. L. 43 is the complement of 41.

45/6. *Ni-gil-li-ág-gi*. This text seems reasonably certain. *Gil* in V. 16, 71c appears as equivalent to *ga-ru* []. This must be *ga-ru-u* "to be hostilely inclined;" cf. *garā*, *girā* "enemy." I cannot explain the ending *-ág-gi*. *Ittanangiri(ni)*, therefore, is probably Iftaneal form from *garā*. This passage, then, like 41/2, is simply a prolepsis of 47/8.

47/8. *Narran* is a variant, perhaps ES. for EK. *kaskal*=*xar-rānu* "road," Sb. 78. The Sum. phonetic writing *xar-ra-an* is found also II. 38, 23c; V. 26, 2g, *xarrānu*; and IV. 20, nr. i, obv. 12; II. 38, 24c=*urru* "way." We must, I think, regard Sum. *xarran* as a Semitic loanword from *xarrānu*, which appears to be a derivative from *xarāru* "dig, hollow out" (cf. *xurru* "hole"; *xurru* "canal"). A parallel instance is *sāqu* "street" from *sāqu* "to be narrow," or transitive, "narrow down;" cf. Sfg. 9, n. 4. *Iāē* is, of course, ES. for *igē*, HT. 134; cf. 65 obv. The suffix *-ku=ana*; in 65 obv. it represents *ina*.

49. *Bar* here must be *āšib*; cf. Br. 6875; *baru* is undoubtedly *purakku*, Sb. 354, of which *-ga* is probably phonetic complement. *E-ne*="those who."

50. The Assyrian translator is doubtful here, with respect to the correct rendering of *šig* (PA, 49), as he gives three variant versions; viz., "they enter before me;" "they hasten unto me;" "they afflict me," of which the latter seems to me the best, as the context plainly shows the hostile intent of the gods. For *šig*=*narādu*, cf. Br. 5583.

51/2. The break after *bar-bara* is not large enough to contain *e-ne* as in 49. *UŠ aš-a-an* is plainly *kibsa ištēn* "(with) a single tread." *Uš=kabāsu*, Br. 5036, but *kibsa* is generally explained in Sum. by *ki-uš*, II. 27, 50g; V. 19, 52a; IV. 23, 50b. The usual pronunciation of the non-Semitic numeral is *diš*, represented by a single perpendicular wedge; *aš*, the horizontal wedge for "one," I find only here and IV. 19, 46a. Lehmann, *Šanaššumukin*, p. 128. n. 4, regards the horizontal *aš*-sign as a mere graphical variant for *diš* and considers that "one" was always pronounced *diš*; cf. also Jensen ZA. i. 188. The "gutation" of the perpendicular *diš*, however, has the value *aš* (a perpendicular wedge crossed by three horizontals), which seems to me to confirm the value *aš* for "one" (cf. on the horizontal *aš*, Delitzsch, *Entstehung*, p. 69). The adverbial and verbal *-a-an* should be read *-ām*. *Lāa=arādu* only here. The common Sum. form is *dal*, IV. 3, 19/20b. The Assyr. *šuru-(tu)* is very doubtful.

53/4. *Lul=sarru* in several passages; cf. Br. 7275. *Ni-me* I take as a part of the verb "to be" (*mē*) unexpressed in Assyrian. See above on 16 obv. *A* must be the equivalent of Assyr. *mi*, probably a defective writing for *mi-e* "water," Neri. ii. 10. That the infix *-nub-* may be used for the first personal object is clear from II. 48, 21gh; *nun-nub-siga=utannišanni* "he weakens me." It usually appears as the sign of third person, as *-rab-* is the common infix of the second person.

55/56. *Mulu lulla*, lit. "the person who is rebellious." ES. *mulu*=EK. *gāl* (IK.), cf. ZA. i. 193. Neither in 53 nor 55 is there any indication of the fem., which might have been shown by means of *sal*. It is interesting to note that *bēliku* is written here with *li-* instead of *ni=ili*, Sfg. 61, n. 5, as above, *passim*.

57/8. The Sum. line is incomplete, as only the first half of it was written. I supply *til=gamāru*; cf. *ba-e-til=gamrat*, obv. 61. *Til*, however, has the value *uš*, Sb. 223, and *uš=emēdu*, *passim*, Br. 5032, as indicated here *ba-e-(til)=ēmid*. I find the prefix *ba-e* only with *til* (*uš*); *dirig-dirig=atāru* and *tuš(ku)=ašābu*, so that *til* is probably the correct reading here.

59/60. *Sa-a* (DI-a)=*šanānu* here and 63 obv. The vocalic complement *-a* leads me to adopt the reading *sa* for DI in this passage; cf. Sa. iii. 36, II. 7, 4e and Br. 9519. The usual Sumerian combination for *šanānu* is *dadi*, cf. Br. 6689, which

seems to be a dissimilative reduplication of DI(?). The simple root DI-a or *sa-a* in 59 is a *hāl*-clause=Semitic relative. It is here exactly equivalent in sense to the Turkish relative participle seen in *gidip* "one who goes," only in Turkish the ending *-ip* is necessary. *Mu-(ul)* is ordinary ES. (Br. 6811 and 63 obv.) for EK. *gāl* (IK), see Br. 5430.

61/2. *Mēri* is ES. for EK. *gīr*=*tallaktum*, V. 16, 25ab; cf. also HT. 134 § 2, and below obv. 63. In the Assyrian line 62 the possessive is not expressed in *tallaktum saḡātum*, but it appears in Sum. *ellā-mu*. In 62, *gam-mar* is of course *gam-rat*, as Jensen pointed out; *Deutsche Litzy.*, 1891, col. 1451.¹

63/4. *Mēri* here=*šēpu* "foot"=EK. *gīr*; cf. HT. 134, § 2.

65/6. *Idēnuku*; *idē*=EK. *igē*; see on 47 obv.; *-ku* here=*ina*, as in 37, 39, obv. *Aba-ām* (*a-an*)=*mannu*; cf. on 37 obv.; *-ku*=*ina*; cf. on 67 obv.=*ina* and 47 obv.=*ana*.

67/8. The ending *-ku*=*ina*; cf. s. v. 65 obv.

69/70. The Sum. (*in*-)*du**mu* which, in spite of the broken text, evidently equals *pīt purīdū*,² 70, is very doubtful; cf. Br. 4236. *Pīt purīdū* must mean something like "the rush of my onslaught;" cf. the parallel IV. 26, 42a: *ina pīt purīdika mannu ipparaššid*. In HT. 76, 15, *Nusku* goes to *Eu* in the depths of the abyss *purīdu* (adv.). In this latter passage, the Sum. equivalent (EK.) is *gīr-pap-rat-la* "with the foot of compulsion;" *pap-rat*=*pušgu*, Sc. 302. *Gīrpap-rat* also=*etēqu* "advance, said of an army," IV., 17, 11a and *italluku* "go," Br. 1154. It seems highly probable, therefore, that *purīdu*, whose derivation is unknown, must have a similar signification. In our present text the element *du* of (*in*-)*du* may be equivalent to *alāku* "go." The meaning of *in* is obscure, if indeed *in* is the correct reading. *Šub*=*naparšudu* "flee," Br. 1439.

71/2. The EK. form *tur* is written here for *martum*, but it was probably intended to be pronounced *ṭummu* as in 18 obv.; cf. II. 37, 54e *tur*=*du-mu* (i. e. *ṭu-mu*, ZA. i. 19 and II. 48, 33a, Sa. v. 33). *Max* can only mean *girtum* "exalted," while *didu* may be a dissimilative reduplication from *dī*=*dīnu* "judgment;" cf. IV. 2, 3c: *lugal dī-da-kit=bēl dīni* "lord of judgment" (also Zb. 83). The break in the Assyrian line 72 is quite long enough to admit the restoration *martum (girtum dīni) ša Bēl anāku* "the exalted daughter of the judgment of Bel am I."

¹ Cf. Hwb. p. 199 b.

² Suggested also by Haupt.

73/4. *Gal-di=tizqāru*, a form like *ritpāšu=zitqāru*, from *קָר*, the real meaning of which is probably "noble; prominent."

The fem. *tizqārtum* must be assumed in this passage, although it occurs nowhere else. Mr. S. H. Langdon assumes that *ilu Sin* here is a scribal error for *ilu Bēl*, i. e. that the scribe should have written five corner wedges (50, the symbol of *Bēl*), instead of three (30, the sign of *Sin*; viz., the thirty days of the month). In view of the Sum. *ammēr Enzuma=Sin* I see no reason to adopt this emendation. Moreover, the fact that the goddess calls herself the daughter of both *Bēl* and *Sin* is quite in accordance with the universality of dominion ascribed to her in the rest of the hymn.

75/6. *Sallugga* can only mean *taknītu* here, cf. II. 35, 46c; IV. 25, 55b, which must signify "a woman taken under one's protection," perhaps "spouse" or "concubine;" cf. *kinātu* "maidservant" from this same stem *kunnā*, and perhaps *kinātu* "household retainers," Hwb. 338. The ending *-nūt* in 76 must be the final of *tak-nit*. I consider *ri* in *be-ni-ri* in this line to be an error for *-ku*, i. e. *be-ili-ku*, although *ri* is clearly written. *Nu-dim-mud* "the artificer" is of course *Eu*. Here it is well to note the presence of *me-en* for the verb "to be," in this case = *anāku*; cf. the remarks above on 16 obv.

77/8. Most unfortunately we are confronted with the familiar Assyr. *xibīššu* of the scribe "broken off," a form like *ediššu* from the adv. *xibeš*. The stem is *xipū*. Owing to the Sum. *ū* in the second member and the Assyr. *-ra* I read *labīra anašši* as the equivalent of Sum. *munēlla*. *Ū=labīru*, Br. 9465. This makes it impossible that the obscurely written *e-na* of the first member can be *ēnu* "eye." It must rather be from *enā* "to bow down, oppress," in parallelism with *labīra* "old." The Sum. equivalent for *ena* may be *mulu bal*, as in V. 39. 27g, or simply *bal*, as in K. 247, ii. 20, 25. *Ēl* in the first member is probably *hāl*-phrase for the first *anašši*.

REVERSE.

1/2. The reverse seems to continue the sense of 77/8 obv. I supply *lugal* in Sum. = *šar-ra*; cf. IV. 29, 21a, 22a, *lugal=šar*; viz., the sign *nisigū*, Br. 4286. *Ēlla* is again *hāl*-clause, while *munuabēlla* is the finite form with infixed object *nab*="him."

Assyr. *a-ta-a*, not expressed in Sum., must be the adv., *atā* "verily," found in the epistolary literature as a resumptive; cf. Hwb. 156.

3/4. *Siba-ra-mu* "to (*ra*) my (*-mu*) shepherd" (*siba*); *mēn* = "I am" (?). Then follows a broken passage as indicated by *ribi* (abbrev. for *ribiššu*). *Munnabsšūmmā* plainly = *anumdin*. The ending *-āmmā*, ES. for *āggā*, is difficult. *Am*, Sb. 205, and *āmmā*, V. 25, 22a, are Sum. forms for *malādu* "measure out, apportion." *Šūāmmā*, therefore, in our passage and in 21 rev. (*q. v.*) may merely be a sense-reduplication of the idea of *nālānu* "give, convey." This point is, however, by no means clear as yet.

5/6. I find *sa-a* = Assy. *li* only here. *Aba* = *arku* for *bar* (cf. 65 obv.) is also peculiar to this passage.

7/8. *Sa-par* = Assy. *sapāru* "net;" cf. Br. 3126. It is probably from a Semitic stem *sapāru* "enclose;" cf. *supāru* "enclosure," Hwb. 509, and the name of the wall *Tābi-supāršu* "its enclosure is good," Zb. 73, n. 2. On the other hand, *sa* = *šētu* "net," Sc. 142, but this may be only accidental. The probability is that the combination *sa-par* = *šētu šuparurtu*, IV. 26, 23a "an arranged (i. e. spread out) net" is a non-Semitic paronomasia on Assy. *sapāru*. *Edinna* = *gēri* "field" must have stood in the original text here. *Lil* = *zayiqi* "storm wind," Sc. 212 and *lilla* = *šāru* "wind," IV. i. col. v. 4/5, 41/2. Here we have *lilla* = *zayiqi*. *Šuruna* undoubtedly means *šur-buṣat*, but only in this passage. It may be ES. for *šar-ra* = *rabaṣu* II. 36, 24, 25ab. The *šu*- in *šuruna* is probably not the sign of the Shaphel.

9/10. Prof. Haupt suggests in 10 *itqurtum*. The probability is that it was preceded by *šētu* "net." The Sum. has *sa* and traces of the sign *gīl* = *itqurtu*, K. 246, col. iv. 37, with phonetic complement *-li*, as indicated in the transliteration. Both the derivation and meaning of *itqurtum* are uncertain; see Hwb. 160, but the word is evidently an adjective here qualifying *šētu*, i. e. "some sort of a net which in the field is spread am I." *Edin* should follow *an-na*; cf. *anna-edinna* = *ina gēri*, IV. 3, 1a. The verb is entirely obliterated except the Assy. fem. ending *-at.*, but it must have meant "spread."

¹ Line 10 was also discussed by Jensen, ZA. i. 65.

11/12. For *sa*=*napāru*, see Br. 432^r. In 12, *šitbātum* seems to me to be the Ifteal adjective from *tebā* "go forth hostilely," hence my translation.

13/14. *Kur-ra-ga*=*ina kirib šadē* is very curious. We find *an-šā-ga*, K. 4386 col. iii. 56=*kirib šanē*, where *-ga* is merely the phonetic complement of *šā*(*šāga*) "heart, midst." In our passage we expect *šā* or the postposition *-ta* or both; *ga*, however, undoubtedly has the force of *kirib* here. *Ba-sig-kab-du-ga* is evidently the equivalent of *iššarānu*. *Ba-* is of course the verbal prefix; *sig*(*PA*)-*ga* appears with *bīl* "fire;" *bīl sig-ga*, II. 34, 70a=*kamā* with *ḏ*, but this must be an inaccurate writing for *qamā*, as *ka* and *ga* are interchangeable. In *sig-kab-du-ga* we clearly have a fuller form of the same combination, but I cannot explain it further. *Sig*(*PA*)=*namāru* "shine" in one passage, K. 40, col. iv. 1, Br. 5582, which tends to confirm my interpretation of this sign in a combination meaning "burn." *Iššarānu* is probably Ifteal.

15/6. *Ṭububu*, only here, is clearly *muttabritum*. *Ṭetalla*=*napluša* looks like a loanword from Sem. *ṭitallu* "flame." *Ṭe*, however, may be read *bīl* "fire" and undoubtedly suggested this idea to the ancient reader. It was probably not read *bīl-tal-la* here, as we find *te-tal*=*ṭitalbum*, K. 4361, col. i. 4. It is clearly another paronomasia, as in 7/8 rev. *Šēk* (*še-ig*)=*a-am*, V. 32, 21a; lit. "water of heaven"=*zanānu* "rain;" *na* is abbreviated form of *mal* (ES.) "to be." *Muttabritum* is evidently Ifteal of *barā* "be full, sated." *Iazanunu* in HT. is clearly an error for *izzanunu*, ZA. i. 65/6.

17/8. *Šul*=*edlu*, *passim*. *Katarra*=*nuddallum* from *dulālu* "be humble" *ka-tar*, IV. 29, 15b; Zb. 73/4. The second *ra* in our text is the postposition *ana*. *Ka-a*=*pīšu*; *šu*=*pasāsu* "destroy" only here, but *šu*=*sarānu* "overthrow," *passim*, Br. 10839. With *ne-mēn*, prefix *ne-* for first person, cf. *nerabbi*=*aqabbi*, IV. 10, 5b *et passim*. For 17^r rev. see also Guyard, ZK. i. 97, n. 2.

19/20. In *mērianšūella* we have a repetition: *mēri*=*tallaktum*, see above on 61 obv. *An* and *šūella* both mean high, i. e. *šaqātum*. *Ki-a*=*ina ercītū*, IV. 4, 5b, not expressed in Assyrian. *Dīb-dīb-bi*=*kamā* "bind," Br. 10683 and *gabātu* "seize," Br. 10694, *passim*. These meanings are closely allied to *muqassisu*=*muqaggiṣu*, קָצַץ "cut off," found only here.

21/2. This is a very difficult passage. *Gaba* undoubtedly signifies *irātum*, probably pl. of *irtu* "breast," *Xamim* must be participle of *xamāmu* "cut, harvest, store up," syn. of *egēdu*, because *ir*=*xamāmu* in this sense and *not* in the sense "lead, govern." I render tentatively, therefore, bearing the context in mind; *xāmim irātum* "those who store up proud thoughts." *Irtu* means "advances" in the connection *mutār irtišu*, Hwb. 125 and may perhaps be construed in this sense. I read *xarran* = *urru*, following obv. 47 rather than the usual *kaskul*. On *šidāmmā*=*uadānu*, cf. s. v. rev. 3.

23/4. *Am-u=amāku* "lead" only here. The EK. form is *anna*, *passim*; cf. ES. *āmmā* here, evidently a dialectic variation of EK. *anna*. *Ud-ka-bar*=*zabar*, Sb. 113.

25. From here on the inscription is too badly mutilated to admit of consecutive translation, although the general meaning seems apparent (see above, p. 107). This line which has no Sum. equivalent is evidently an allusion to the glowing of the metals.

26. This is an ES. line without Assy. translation.

27. I supply *unnu* here, as in 18 obv. Note that *ištāritum* is written with the determ. *ilu*, but cf. 19 obv.

31. *Gi-in-bi* must be compared with *gi-in=amtu*, K. 2759, 10 *et passim*, Br. 2470. The *-bi* suffix is the demonstrative, unexpressed in Assyrian. *Tug=lupātu* "turn over, disturb," Br. 3797. It may mean "excite" here; cf. Zb. 12, 5.

33. For *muhu*, also 37 rev., cf. 55 obv.

36. *Muntāri-ēnnānu=etērbu* is relative conjugation with the final *-nu* as above 25 obv. The infix *ēna* occurs also with *-zu*; *garri-ēnnazu*, Br. 11957=*tabšima*. For *ēdab*, pres. of *adābu*, cf. IV. 61, 35b: *ākan šā nakru ša idibakanni* "where is the foe who has troubled thee?" The usual ideogram for *adābu* is EK. XI-GAR=ES. *gi-ib-mar*, Sd. 19.

37/8. I cannot explain this passage. The Sum. *-ennānu*, as in 35 rev., shows a relative clause.

39. *Dim* would be the ES. value for *gim* in *al-dim*. It is cognitive with *di-di=alāku*, 41 rev.

41/2. On *aba* see s. v. rev. 5. *Di-di*, cognitive with *dim*, 39 rev.

47/8. *Mu-tin=zikaru* also II. 7, 13c; II. 25, 39a, *et passim*; Br. 1326. *Mutin* is probably ES. for *giš, nitax=zikaru*; UŠ,

Br. 5048. The combination ~~𐎶𐎵~~-*mu-tin*=*zinništu* "woman;" cf. *nu-𐎶𐎵*-*mu-tin*, 49, 50, 53, rev. *Sal* is, of course, the usual ideogram for *zinništu*. The character ~~𐎶𐎵~~ is evidently a variation of the sign *munuz*, Br. 8177=*lḡnu* "offspring, descendant," syn. of *šurū*=*שֹׁרֵי*. The occurrence of this sign in combination with *mu-tin*=*zikaru* is explicable, but unusual.

55. *Gál*=*pītā*, only IV. 18, 15a; cf. *gal* (IK)-*gál*=*pītā*, Bezold, Lit. 181, n. 1. The *ma-* in *ma-gál-lu* in our passage must be the verbal prefix with infinitive force.

59/60. The combination *dim-me ma-má-a* seems like two words representing the Assy. *uḏištu* from *חֲדָשׁ* "be new, fresh," hence in this connection probably a virgin(?). See comment above, p. 107. It is impossible to determine whether there is any connection of ideas between our *dimme* and *dim-dim-ma*=*dunnamā* "a weakling," II. 28, 68b. *Dim-ma* also=*šarru* "king," V. 16, 52e.

61/2. *Emāqtum* must be fem. abstract for *emāqu* "strength," especially "bodily strength," *passim*, Hwb. 39. The usual ideogram for *emāqu* is ID (*a*), but also *ni-e* (GIR), cf. s. v. 58 obv. The mutilated ideogram ending in *-ši* in our present passage (61) is inexplicable. *Ē-ta*=*ištu bīt*; note the construct state.

63/4. On *me-e*=*andku*, without *-n*, i. e. *mēn*, cf. Haupt's able remarks, Sfg. 31. *Dam-dam* with suffix *-ta* must mean "as a wife."

65/6 *Ṭur* here must be read *tumu*; cf. 14, 20 obv. Note the masc. *-šu* in *ummi-šu*, where we expect *ummi-ša*. This is not uncommon and may be traced to non-Semitic influence.

67/8. With *gud-gud-āu*=*ebāti*, cf. II. 30, 10g and Br. 4704. The sign for *uru* is *sal*=*galla*, II. 30, 14-19, but it is broken here. *GIŠ-I-ḫ-BI* is incomprehensible.

69/70. We should perhaps supply (*sal-ki-ta*-)*da*=*uru šaplāti*.

70. I cannot explain *ŠU-LU-ŠU-AN*. It is probably not equivalent to 72 rev.

72. *Parisku*, as suggested by Mr. S. H. Langdon, is permanent of *parāsu* "decide."

73. *UD-bi*=*ina amišunma*, which is not expressed. Mr. Langdon has ingeniously translated this line as I indicate: *sua-a-bi* lit. "her how long;" *sua*=*axulap*, HT. 115, rev. 5. Cf. also Zb. 28 and HT. 122, obv. 12.

The last eleven lines are hopelessly mutilated.

Eme-sal forms discussed in the Commentary.

<i>Am-má</i> , 23 rev.	<i>Mén</i> , 16 obv.
<i>Am-u</i> , 3 rev., 23 rev.	<i>Mér</i> , 35 obv.
<i>Ba-síg-kab-du-gu</i> , 13 rev.	<i>Méri</i> , 61 obv.; 19 rev.
<i>Éé</i> , 35, obv.	<i>Mullillá</i> , 14 obv.
<i>Din</i> , 39 rev.	<i>Mulu</i> , 55 obv.; 33 rev.
<i>Din-me</i> , 59 rev.	<i>Mu-tin</i> , 47 rev.
<i>Din-din-ma</i> , 59 rev.	<i>Nu-din-mud</i> , 75 obv.
<i>Egizagga</i> , 39 obv.	<i>Nu-me-mu-tin</i> , 47 rev.
<i>E-ne-ám</i> , 33 obv.	<i>Sa-a</i> , 59 obv.
<i>Ér</i> , 31 obv.	<i>Sa-a</i> , 5 rev.
<i>Éri</i> , 25 obv.	<i>Šék</i> , 15 rev.
<i>Xarrán</i> , 47 obv.; 21 rev.	<i>Si-ám-má</i> , 3 rev.
<i>Idé</i> , 47 obv.; 65 rev.	<i>Šu-mu-ma</i> , 7 rev.
<i>In-du-mu</i> , 69 obv.	<i>Te-tal-la</i> , 15 rev.
<i>Kur-ra-gu</i> , 13 rev.	<i>Tu-mu</i> , 18, 71 obv.; 61 rev.
<i>Láa</i> , 51 obv.	<i>Ú-bu-bu</i> , 15 rev.
<i>Mal</i> , 16 obv.; 59 rev.	<i>Umm</i> , 16 obv.
<i>Ma-má-a</i> , 59 rev.	<i>me-mu-tin</i> , 47 rev.
<i>Marza</i> , 16 obv.	

*Blood Test as Proof of Kinship in Jewish Folklore.*¹—By
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I.

BLOOD, among the Jews, possibly because it was held to be symbolic of the soul, **הָרֶם הוּא הַנֶּפֶשׁ** (Deut. xii. 23; cf. Gen. ix. 4), was an object of sacred awe. Blood being the seat of the soul, its prominence in folklore, where it is employed for the binding of compacts, the sealing of kinships, for remedial, superstitious, criminal, and even judicial purposes, is not a surprise to the investigator. The ancient practice of covenanting by means of blood, still in vogue in certain parts of the world, forms an interesting chapter in the study of ethnic superstitions, and it will suffice to refer to two books on the subject, wherein the rite is fully described (see Paulus Cassel, *Die Symbolik des Blutes und 'der Arme Heinrich,' von Hartmann von Aue*, Berlin, 1882; H. C. Trumbull, *The Blood Covenant*,² Philad., 1893). It is not the design of this paper to discuss the origin and diffusion of the blood-rite, which has *never* been practiced in Israel, though the prevalence of the custom, even among civilized peoples, is responsible for the horrible blood-accusation against the Jews through the course of the centuries (cf. H. L. Strack, *Das Blut im Glauben und Aberglauben der Menschheit*, etc., Munich, 1900; *Jewish Encyclopedia*, vol. iii, pp. 260-267); nor is it necessary to set forth the many quaint and curious blood-superstitious as remote parallels to the legend we are about to present.

However, there is one superstitious custom, not unknown to judicial courts, concerning which it is proper to say a word, the better to understand the underlying motive of the story which follows; it is the so-called "trial by blood,"—an "ordeal of touch," as it is otherwise termed,—which has served, in criminal cases, to identify and convict a murderer. There is, namely, a widespread belief that the blood of a murdered man will bear

¹ Paper read at the last Annual Meeting of the American Oriental Society, in April, 1903.

witness against the murderer, by flowing afresh at his touch; the *living blood* crying aloud from the inanimate body for vengeance.

Trumbull has already pointed out that this blood-test is frequently met with in ancient European literature, appearing as early as the *Nibelungen Lied*, passages from which he quotes (on pp. 142-43 of 1st ed.). The following historic incident attests the prevalence of the belief in the efficacy of "the ordeal of touch" in the seventeenth century. It was during the trial of Philip Standsfield, in 1688, for the murder of his father, Sir James. The testimony was explicit, that when this son touched the body, the blood flowed afresh, and the son started back in terror, crying out, "Lord, have mercy upon me!" wiping off the blood from his hand on his clothes. Sir George MPKenzie, acting for the State, at the inquest, said concerning this testimony and its teachings: "But they, fully persuaded that Sir James was murdered by his own son, sent out [with him] some surgeons and friends, who having raised the body, did see it bleed miraculously upon his touching it. In which, God Almighty himself was pleased to bear a share in the testimonies which we produce: that Divine Power which makes the blood circulate during life, has oft times, in all nations, opened a passage to it after death upon such occasions, but most in this case." (See the quotations in Trumbull, *loc. cit.*, p. 145, note 2.) The ordeal of touch, or of "bier-right," seems to have been known to Shakespeare, and Mr. Henry C. Lea (*Superstition and Force*, pp. 315-23) has gathered all available data on the subject, recalling "an old-time Jewish custom," which the writer is not able to verify. Quoting from Gamaliel ben Pedahzur's curious *Book of Jewish Ceremonies* (tr. from the Hebrew, London, 1738, p. 11), he says that it was the practice among the Jews to ask pardon of a corpse for any offences committed against the living man, laying hold of the great toe of the corpse while thus asking; and if the asker had really inflicted any grievous injury on the deceased, the body was supposed to signify the fact by a copious hemorrhage from the nose (see Trumbull, *l. c.*, p. 146). I find no reference to such a custom in the Book of the Pious (*Sefer ha-Hasidim*), a most remarkable repertorium of ethics, superstition and mysticism, written in the Rhinelands during the thirteenth century, concerning whose

authorship, despite the erudite labors of Güdemann (*Geschichte des Erziehungswesens und der Cultur der Juden in Frankreich und Deutschland*, Vienna, 1880), nothing definite is known. It is popularly ascribed to Judah Hasid, but it is not the work of a single writer; it is rather a production of the *Zeitgeist*—a wonderful conglomerate of the sublime and the puerile, the ethical and the ceremonial. Its value for the study of mediæval folklore is incalculable, and to it we owe our knowledge of contemporary customs and superstitions. We read there (in § 1143 of the *Basle* edition, 1589, p. 114^a), among other things, that whenever a murderer approaches the body of his victim, the wound breaks out bleeding afresh, accusing him and demanding vengeance. There is this curious addition: that the same wonder happens if anyone who has partaken of soup without eating bread after it should approach the corpse of a man who had suffered a violent death. It is therefore advisable, as a means of precaution against becoming a suspect in such cases, to always eat a crust of dry bread after drinking soup.¹ See concerning this soup-superstition the remarks of Juspa (=Joseph ben Phineas) Hahn (*circa* 1630) in his ספר יוסף אומץ, ed. Frankf. a. M., p. 205^a, where we read that fresh blood wells up from the wound of a murdered man if his body be approached with knife in hand. What is the origin of this fanciful tradition? The blood-test is, furthermore, mentioned by the zealot and mystic Manasseh ben Israel (1604–1657) in his נשמת חיים, Amsterdam, 1651, iii. 3. It is significant that the Jews seem

... וכשנהרג האדם אם יבא עליו הרוצח תפתח המכה¹
ומביע דמו כדי שינקם מן הרוצח כיוצא בו יעשה באדם שאכל
סופא בלעז ובלא זופא [soupe] ששרה פתו במים דווקא ולא
אכל פת חרבה אחר הסופא אם אותו שאכל הסופא יבא על
אדם הרוג יצא דם הפצע כאילו הרגו הוא, ולכך היו אוכלין
הרוצחים פת חרבה כשהיו הורגים וזהו לא תאכלו על הדם.
In connection with this superstition, it is interesting to read what Isaac
b. Judah Halevi, in his *Pentateuch-Commentary Pa'ânēah Rāsā* (Amst.,
1698) to Leviticus xix. 16, writes: שכן דרך ניהוש ההורגין את
הנפש אוכלין עליו פת במלח שלא ינקמו נקמתו ממנו.

to have had faith in this test, though they looked upon the ordeal by water as a *heathenish* practice (see Güdemann, *op. cit.*, p. 200, note 1). It remains to be added that the beginnings of this belief in the power of the blood to speak for itself against the violator of God's law may be found in one or two Rabbinic traditions not generally applied to the subject under discussion. In the Babylonian Talmud, tract *Gittin*, p. 57^b, it is recorded that when Cain had assassinated his brother, the latter was found slain with a stone, *but the earth refused to receive his blood*, meaning, of course, that the blood would not be absorbed (pending the punishment of the murderer?). A still more explicit statement of this idea is to be found in the same place in connection with the constantly flowing blood of the prophet Zechariah, which could not be stilled because of the violent death of so many innocents (see Winter and Wuensche, *Jüdische Literatur*, i., pp. 282-283; P. I. Hershon, *Talmudic Miscellany*, London, 1880, pp. 110, 275, 276; parallel passages are *Synhedrin*, 96^b; Jerus. *Ta'anith*, iv., 8; Midrash to Lamentations, to ii. 2). Arabic writers, enumerated by Max Grünbaum (*Neue Beitr. z. semit. Sagenkunde*, Leyden, 1893, pp. 237-40), identify Zechariah with John the Baptist, whose blood, according to Albīrūnī (*circa* 1000 C. E.), though heaps of stones had been thrown upon it, "rose over them, boiling and bubbling." This continued to flow, proceeds Albīrūnī, until Nebuchadnezzar [*sic*] killed the people, and caused their blood to mingle with it; then it was quiet (see E. Sachau's English translation of his *Chronology of the Ancient Nations*, London, 1879, p. 297, and additional references on p. 437). Albīrūnī, of course, calls attention to the above glaring anachronism in the legendary version of the decapitation of John. According to Christian legend, the drops of blood visible on the so-called *Johanniskraut* (*hypericum perforatum*) are of the blood of St. John, who wanders, unappeased, through the world. The tradition is also known in Jewish sources (see Güdemann, *l. c.*, p. 206, note 1).

One recalls, in passing, the annual pilgrimage paid to the shrine of one of the Catholic saints (St. Januarius) in Rome, on the anniversary of his martyrdom, on which occasion, to the wonder of the many gaping thousands, the blood of the martyr, congealed in a bottle the whole year through, is seen to quicken and to flow afresh.

The belief in the accusing power of blood still exists among the English-speaking people, and it has manifested itself as a means of justice-seeking, along with ordeals of a similar nature, in the United States, within a few years past (see Trumbull, *op. cit.*, p. 147).

II.

This popular and widely diffused belief in the retaliatory power of blood may be at the bottom of the interesting kinship-ordeal set forth in a story which has a strong Oriental coloring. In the *Sefer ha-Hasidim* (ed. Basle, 1581, p. 31^b, § 232¹) we read the following tale:

מעשה ברב סעדיה בן יוסף החכם באחר שהלך למדינת
הים עם עבדו והוליד עמו ממון גדול, ואשתו היתה מעוברת,
לימי' מת הארון והניח כל הממון והלך העבד והחזיק בנכסיו
ואמר העבד אני בנו כשגרל הבן שהולידה שמע שמת אביו
הלך לתבוע נכסיו שהחזיק בהם העבד ונתחתן בגדולי הדור
והיה ירא הבן לפתוח פיו פן יהרגוהו ונתאכסן בבית רב
סעדיה והניח לפניו לאכול ולא אכל עד ששם לפניו אלו
הדברים נתן לו עצה לדבר אל המלך וכן עשה שלח המלך
אחר רב סעדיה לרון דין זה וצוה רב סעדיה להקין דם זה
בספל אחר ודם זה בספל אחר ולקח עצם לעומת עצם של
אבי הבן והניחו בספל העבד ולא נבלע הדם ולקח העצם
ושם אותו בספל הבן ונבלע הדם בעצם כי היו גוף אחד
ולקח רב סעדיה הממון ונתנו לבנו שבא, הרי ראוי לבן
שיתעצב ביום מיתת אביו, וכן אמר איוב כי לא סגר דלתי
בטני ולא אמר בטן אמי שהכל בגוף אחד וכתיב ויקלל את
יומו וירמה בן עשה שלעולם לשנה הבאה באותו יום שלא
היה שמחה לכך יש להתענות ביום שמת אביו.

“There was a man, who went on a journey, taking with him his servant and great wealth, and leaving his pregnant wife at home. It so happened that the master died and left considera-

¹ See also J. Wistinetzki's edition, Berlin, 1891, p. 91, § 291, where several of our parallels are not given.

ble property, which the slave appropriated without further ceremony, passing himself off as the dead man's son and heir. When the son grew up (to whom the widow had given birth), he heard of his father's death and sought out the slave in order to claim his property, which was forcibly withheld from him. Finding him so highly connected with the foremost people of the day, the son was afraid to press his claim, lest he lose his life in the bargain for his pains, and repaired, instead, to Rabbi Sa'adyah ben Joseph, the Gaon. Food was placed before him, but he left it untasted until the entire story had been told. The Gaon advised him to seek redress from the king, which he accordingly did. The king sent for Sa'adyah and asked him to render judgment. He ordered both son and slave to be bled and the blood of each to be let into separate basins. Then he caused some of the bones of the dead merchant to be disinterred and dipped them first into the blood of the slave, but the blood was not absorbed; then into the blood of the son, and lo! the bone forthwith absorbed it, for the two were one flesh. And Sa'adyah restored the dead merchant's property to the rightful heir" This is, in brief, the legend attributed to Sa'adyah Gaon (died 942), a Judæo-German version of which is to be found in the *Simhath ha-Nefesh*, ed. Sulzbach, 1798, p. 11^a, and a German rendering in Tendlan's *Fellmayer's Abende*, p. 262, and in the same author's *Buch der Sagen und Legenden jüdischer Vorzeit*, 3^d ed., Erkf. a. M. 1873, p. 368. Jost (*Geschichte*, vol. ii., p. 235) and Rapoport (in his scholarly biography of Sa'adyah, *Bikkure ha-Ittim*. ix., p. 37, note 49) have both expressed strong doubts as to the Sa'adyanic origin of the blood-test story.¹ The earlier and more elaborate recension of the same legend as recorded in the משלים של שלמה (*Parables of Solomon*²) runs as follows:

מעשה באדם אחר שהיה בימי דוד מלך ישראל והיה עשיר הרבה מאד והיו לו עבדים ושפחות ונכסים רבים והיה לו בן יחיד מה עשה אותו אדם קנה סחורה הרבה ונתנו ביד בנו. נכנס אותו הבן בספינה והלך באפריקה ועמד שם שנים

.... רחוק היא מדרך הגאון לסמוך בדיני.
ממונות על סגולות זרות ובלתי נבחנות.

² About this collection see Steinschneider in *Hebr. Bibl.*, xviii., 38-39.

הרבה ובתוך אלו השנים מת אביו והניח קניינו לעבד אחד בעל האוצר שלו וזה העבד התחיל לכבוש כל בני הבית ביסורים משונים עד שהניחוהו והלכו להם ונשאר יחיד עם כל אותו הממון שהניח לו אדונו והיה אוכל ושמח מתאוותו הממון. לאחר זמן חזר אותו הבחור מכרכי הים והלך לבית אביו ומצא לאביו שנפטר לבית עולמו. התחיל ליכנס לביתו יצא לקראתו העבד ורחפו ואמר לו מה לך בבית בן בליעל. מה עשה הבחור נטל המקל והתחיל להכותו על ראשו ואמר לו עבד תפשת כל עמלי ועמל אבא מארי ותשמח מאותו הממון. עשו מריבה גדולה ואין מציל ביניהם עד שברח בן הזקן והלך לקבול על העבד אל המלך ואמר: המלך לעולם יחיה! איש פלוני לקח כל הממון שהניח לי אבא מארי ואומר לי אין אתה בן הזקן אלא אני. אמר המלך יש לכם עדים אמרו לו לאו קרא לאותו העבד ואמר לו יש לך עדים אמר לו לאו. אמר לו המלך לעבד לך לשלום אין עליך להשיב דבר. כששמע בן הזקן כך התחיל לבכות ולצועק לפני המלך פעם שנית ושלישית צעק למלך עד שגער לו המלך ואמר לו אם תשנה יד אשלח בך אם יש לך עדים טוב ואם לאו מה אעשה לך. שמע שלמה המלך הדבר קרא אותו מצד ואמר לו צעוק עוד אל המלך ואם יכעוס עליך אמור לו אדוני המלך אם לא תתן לי דין שים אותו ביד שלמה בנך נתן אותו ביד שלמה בנו שיתן לו דין אמר שלמה לבחור תדע באיזה מקום קבור אביך אמר לו לאו עוד קרא לאותו העבד אמר לו תכיר קבר אביך אמר לו הן אמר לו המלך לך והבא לי זרוע של אביך הלך וחתך זרועו של זקן והביא לו אמר להם הקיזו שניהם וכל אחד ואחד יקבל דמו בכלי שלו אמר לעבד טבול העצם בדם שלך וטבל ולא צבע אמר לבן הזקן טבול גם אתה בדם שלך וצבע העצם והראהו לכל העם. אמר להם ראו זה הדם מן זה העצם יצא מיד תמחו כל ישראל וחזר כל הממון לבחור והעבד רדה בו על כרחו...

The first edition of this interesting collection of tales appeared in Constantinople, 1516, but they are very much older. Steinschneider sees Arabic influences in the introductory words (see

his *Manna*, Berlin, 1847, p. 101, no. IX.) and assigns it, hypothetically, to the early Gaonic period. Its age cannot be determined and we must content ourselves with this rather vague classification. Jellinek, in republishing the story from the *editio princeps* (*Bet ha-Midrash*, iv., Leipzig, 1857, pp. 145-46; cf. also introduction, p. xiv, No. IX.), calls attention to a remote parallel to which we shall refer below. Variants of the same legend are to be found in the *מעשים של עשרת הדברות*, second ed., Ferrara, 1554 (p. Steinschneider, *Catal. Boll.*, pp. 606, 624); in Joseph Shabbithai Farhi's *עושה פלא*, Livorno, 1869, i., p. 20^b-21^a; and in various MSS.¹ Johanan Allemanno (1435-1527), in quoting the story (in the Introduction to his Commentary to Canticles, called *Heshek Shelomoh*²), mentions the current superstition of the blood welling up at the touch of the murderer in proof of its credibility, making it plausible that the two traditions are inter-related. He does not seem to know of the early mention of the legend in the *Sefer ha-Hasi-dim*, and, as Steinschneider has pointed out, he must have borrowed it from obscure Oriental sources (see his article in *Sabbath-Blatt*, edited by Jellinek, 1846, pp. 61-62; *idem* in *Hebr. Bibliogr.* xiii., 134; xviii., 39, where parallels are given).

Allemanno's version of the tradition runs as follows :

.... אבותינו ספרו לנו מעשה שהיה בין שני אנשים עברים נצים על איש אחד זה אומר אני בנו ואתה עברו ילד ביתו וזה אומר אני בנו ואתה עברו ילד ביתו. ובאים לירש את כל כבוד עשרו ואין אתם יודע מה. מי בן הגבירה ומי בן השפחה ואין עדות ואין אמתלא. ובאו לפני אב הבחינה ובחן את ענינם בבחינה טבעית ויחס נעלם והוציא מכל אחד מהם דם בשני כלים. ואמר להביא עצם מעצמות המת אביהם וחלקו לשני חלקים. ונתן עצם אחד בדם באחר ועצם אחד בדם האחר לפני כל העם וכתב את שמותם על דמם ונתנם במשמר עד הבוקר. ויהי בבוקר והנה העצם האחד נדבק בדם האחר דבק טוב בדבק הבשר אל עצמו.

¹ MS. Munich, 222, f. 75 (see references to Steinschneider, *infra*).

² See *Sha'ar ha-Heshek*, ed. by Jacob ben Moses Hayyim Ibn Barukh, Livorno, 1790, p. 10^b.

והעצם האחר ברם לא דבק מאום. ושפט משפטו כי זה בא
לייחם הדם מהבן לעצם האב כי יחס הנמצאות הם דברים
נפלאים כפי מה ששמעו מדם הנרצח היוצא לקראת הרוצח
בפגעו בו לרתיחת את דמו המזיק.

"Our fathers" tell the story, says the author, of a quarrel between two claimants, each disputing the other's right to an inheritance. Both declared themselves to be the legitimate beneficiaries of the estate of a deceased father, and each accused the other to be the slave and not the son of the departed. No witnesses or any corroborative evidence being forthcoming, they repaired to the judge, who submitted each to the *blood-ordeal*. He bled both claimants and ordered the bones of the dead man to be brought to him. That being done, he dipped a piece of the bone in the blood of the two claimants, in the sight of all the people, "wrote their respective names on the blood," and held them until the following morning, when it was found that the blood of one cleaved to the bone, but that of the other remained unaffected. He decided this to be a conclusive proof of the blood-relationship of the rightful heir.

In connection with this the author reports the tradition that the wounds of a person who had suffered a violent death break out bleeding afresh at the touch of the murderer.

The writing of the names on the blood of each points to some cabbalistic belief in the efficacy of names, and there is little doubt that in some earlier version of the story the **שם המפרש**, or the *Ineffable Name*, was used as a test. Allemanno, the mystic, the teacher of the famous Cabbalistic writer Prince Pico de Mirandola (see Steinschneider, in *Hebräische Bibliographie*, vol. xxi, 1881-1882, pp. 109-113; 130-132; J. Perles, *Beiträge zur Geschichte der hebr. und aram. Studien*, München, 1884, p. 191 ff.), was addicted to occultism and quotes many similar beliefs and traditions in his writings. The above narrative he concludes with the statement: **קצות הן אלה קצות**....

משפטיו אשר ימצא ברינים הנעלמים וכו'—which makes it evident that the source of the story of the blood-test is some "hidden lore," known to him by oral tradition.

Finally, the same story is told in the **מטה משה** of R. Moses ben Abraham of **פרעמסלא** (3^d ed., Warsaw, 1876, p.

157, § 764), a disciple of the famous Cabbalist Solomon Luria, without any source. There, too, the story is accredited to Sa'adya Gaon, proving conclusively that the author copied it from the *Sefer ha-Hasidim*. The first source of all these versions is no doubt the *Book of Legends*, composed by Rabbenu Nissim of Kairuan about the year 1030 (see Zunz, *Gottesd. Vorträge der Juden*, 2^d ed. Frankf. a. M., 1892, p. 139; A. Harkavy, in the *Steinschneider-Festschrift*, Leipzig, 1896, Hebrew section, p. 12 and ff.). It is extant in two recensions and there are several editions published, the first three (Constantinople, 1519; Venice, 1544; Ferrara, 1557) being very rare.¹ The Verona edition (1648) was printed under the title **ליקוטי המעשים** and contains another recension of the legend:

The only son of a rich man migrated to Africa. After a long absence he returned home and found that both his parents had died and that his father's servant was in possession of his inheritance. He met with rough treatment at his hands and submitted his case to David, who, in view of the absence of evidence, rejected the plaintiff's claim. Then it was that Solomon, the son of David, proposed the blood-ordeal. In this account the text reads, not as in the *Sefer ha-Hasidim* **נבלע הרם בעצם**, but **נצבע העצם ברם**.² Whether the Constantinople edition, published in 1519, chronicles the story, we have no means of ascertaining. There is a strong likelihood of its having been borrowed by R. Nissim from the *Meshalim shel Shelomoh*, the first edition of which appeared three years before this one, at Constantinople. Both betray strong Arabian influence, and it is now known that R. Nissim's "Story-Book" was written originally in Arabic (see Harkavy, *l. c.*). The fact that King Solomon, the ubiquitous hero of Moslem tradition, is the judge in the case, would seem to point to Oriental (and possibly non-Jewish) origin.

Steinschneider (in his notes on the subject, *Hebr. Bibl.* xiii., 134; xviii., 39) quotes parallels from mediaeval and modern

¹ For detailed statements about author and editions, see Harkavy, *l. c.*; Steinschneider, *Bodl. Catalogue*; and his *Hebr. Uebersetzungen d. Mittelalters* (Berlin, 1893), p. 938.

² I am indebted for this reference to the courtesy of the Rev. Dr. A. S. Neumark, of New York.

folklore: *Gesta Romanorum*, ed. Graesse, ii., 174, 280; ed. Oesterley 608, n. 196 and 743 (cf. also p. 165, no. 262); Barbazan, *Fabliaux*, Paris, 1808, ii., 440; Kemble, *Dialogue of Solomon and Morolf*, p. 106; see especially Liebrecht in Pfeiffer's *Germania*, vol. xviii., pp. 363, 365. None of these authorities are accessible at the present writing; they can be readily verified by the specialist in folklore. It is interesting to record that a Portuguese version of the legend, hitherto unknown, is included in a volume of tales, fancies and traditions of the Rabbis translated from various sources, in my possession. This curious and valuable collection bears the following title:

“Liuro que contem Diuersos | contos, susesos, e Exemplos de grande | Moralidade e Documento, para entre | tenimento e introducao dos animos | Virtuozos nos caminhos de Deos; tirados | e traducidos de diuersos Liuros hebraicos; | por ordem de ISHACK DE MATATIA ABOAB | e copiado por seo sobrinho | SEMUEL CURIEL: Em Amsterdam | Anno 5436:” Reserving a fuller description of the MS. for another time, I subjoin, herewith, the text of the legend *in extenso*, the original orthography being retained throughout. It is to be found on pp. 13^a to 14^a of the collection, and runs as follows:

Susedeu num homeni no tempo del Rey David.

Oqual moraua num lugar ermo; e era muito rico de fazenda e tinha muitos seruos e seruas; tinha hum filho unico intentou mandalo fazer hum Viagem e carregoulhe hum nauio de diuersas fazendas e foy adar com sigo odito mansebo a terra de Africa na qual se deteue alguns annos para negosear oque leuaua, no meyo dos quais morreo o Pay do tal mansebo, edeixou por eredeiro de todas suas fazendas presentes e auzentes ahum seo criado, oqual come sou logo despois da morte do amo atomar posse de tudo castigando eensenhoreandose demaziadamente sobre os demais criados de caza, com que todos sefugiraõ eficou elle sô alegre emuy contente como senhor detoda afa-zenda; e despois de Vendida toda aque ofilho hauia leuado tornouda Africa para sua caza edandos elhe anoua damorte de seo Pay quis hir tomar possedo que por direito lhe tocaua como eredeiro forsozo, eo criado com muy asperas eescandelozas palauras oafrontou, e elle com arezaõ que tinha naõ menos oagrauou, teque se rezolneo por fimahir pedir justisa diante del Rey David oqual perguntou O hum ea outro se tinhaõ testigos para prou-

arem sua Verdade, eambos responderaõ que naõ os tinhaõ deu el Rey por sentensa que o criado que estaua de posse se ficase com tudo, sem ser obrigado restituir couza alguma, com oque o fillo com amargas lagrimas se postrou hua emuitas vezes a os pees del Rey dizendo naõ era vezaõ nem justica que taõ falsamente perdesse oque por direito humano edeuino lhe tocava; ouuindo Salamaõ asentensa de seo Pay David chamou aomansebo elle dixe que naõ deixase, de outra Ver pedir justisa e se por a cazo seo Pay David se encolorizase contra elle lhe suplicase que remetese o cazo emseo poder, que elle como Salamaõ julgaria o direito, e fazendo oassy entregou el Rey David o cazo empoder de seo fillo Salamaõ, oqual perguntou a aquelle mansebo se Sabia em que lugar estaua enterado seo Pay, erespondendo que naõ, perguntou omesmo a o criado quedezia era odefunto seo Pay, respondeo que sy Sabia aonde estaua enterrado, logo lhe mandou Salamaõ que fosse a sua sepultura e lhe cortase obraso eque lho trouxese [?] diante delle, como ofez, edespois mandou Salamaõ que ambos se sangrasem, e cada qual resebese seo sangue em vazo aparte, dixe Selomo a ocriado do defunto que banhase otal braso em seo sangue e tirando o outra vez do sangue naõ tingiu couza alguma; e despois dixe ao fillo o mesmo e ficou obraso terguido o vermelho, com que ficou todo opouo admirado de ver tal experiensia; emandou logo Salamaõ restituise ocriado toda afacenda a olegitimo fillo do difunto por cuja accaõ se dixe ea sabentouse mais que todo o homem.

A Judaeo-German version of the story, as printed in the *Book of Spiritual Delight* ("Sefer Simḥath ha-Nefesh"),¹ Sulzbach 5558 (1798), p. 11^a, runs as follows:

מעשה איינר איז איבער ים גצאגן מיט זיין קנעכט אין איין
פֿרעמדֿי מדינה האנדלן אונ' הט גרוש געלט מיט זיך גנומן
אונ' די פֿרויא הט ער דר היים גלאזן מעוברת. נון דר סוחר
איז גשטארבן אונ' הט פֿיל געלד גלאזן אונ' דר קנעכט האט
אלש בהאלטן דען דער קנעכט הט גזאגט ער איז זיין זון. נון

¹ See about this book M. Grünbaum, *Juedischdeutsche Chrestomathie* (Leipzig, 1882), p. 238 ff. For this reference to the Yiddish version we are indebted to Dr. M. Steinschneider, who, as early as 1846, called attention thereto. See his article "Ein Büchertitel und ein Märchen (Saadia Gaon betreffend)," in Jellinek's *Sabbath-Blatt*, Leipzig, 1846, no. 16, pp. 61-62.

די פֿרויא דר היים הט איין זון גיזונן אונ' ער איז דר צאגן
 גווארן אזו הט די מוטר צו דעם קינד גרעט מיין קינד דיין
 פֿאטר הט אזו פֿיל גוט גלאזן אונ' איז אלז בייא דעם קנעכט
 בליבן ציג אהין תאמר ווערשטו דאש גוט בקומן אזו איז ער
 אהין גצונן וויא ער אהין קומן איז הט ער גזעהן דר קנעכט
 איז זער תקיף גוועזן אונ' הט גרושי שדוכים מיט זייני קינדר
 גטאן מיט די גרושי חשוכים אלזו הט ער מורא גהאט איין
 ווארט צו רידן אונ' איז גאנגן איין יטטין [= *einst*] בייא דעם רב
 דר הט גהיישן (ר' סעדיה בן יוסף) אונ' הט ניט וועלן עסין
 ביז ער ערשט דר צילט [= *erzählt*] הט וויא עז אים גיט אזו
 הט (רבי סעדיה) אים איין עצה געבן ער זאל עז דעם מלך
 קלאגן אזו איז ער גאנגן צום מלך אזו הט דער מלך גשיקט
 נאך דען רבי סעדיה ער זאל דעם פסק געבן אין דר זאך אזו
 הט (רבי סעדיה) גהיישן מן זאל ביירי צו דער אודר [= *Ader*]
 לאזן אונ' דז בלוט אין איין בזונדר בעקן טון. דר נאך האט
 ר' סעדיה גהיישן מן זאל איהם ברענגן איין קנעכליין פֿון דען
 פֿאטר פֿון דען זון אונ' איין קנאכין גנומן פֿון איין אנדרן טויטן
 אונ' הט ערשט דש פֿרעמד ביין אן ביירי איר בלוט גטאן הט
 דז ביינכי קיין בלוט אן זיך גזאפט דר נאך הט ער דז ביינכי
 אין דען זון זיין בלוט גטאן איז דש ביין גנץ רויט גווארן אונ'
 דז בלוט הט זיך אין ביין אריין גצונן דר ווייל עז איין גוף איז
 פֿאטר אונ' זון האט דער עבֿד דז געלד מוזן ווידר געבן דעם
 זון.

A merchant went to sea with his servant to trade in foreign lands, taking with him considerable means and leaving his pregnant wife behind. The merchant died, and the slave, pretending to be his lawful heir, claimed all his property, which was considerable. The widow had, in the meantime, given birth to a son, and when he was grown up, the mother said to him: "My child, your father left a great deal of money, but it is all in the hands of his servant. Go to him and claim your own." The son did so. When he got to the place where he resided, he found him to be a person of some authority. He had succeeded

in marrying into prominent families, and seemed so highly esteemed in society that the son was afraid to open his mouth. He therefore consulted the Rabbi, who was called *Sa'adyah the Gaon*, and he refused to partake of nourishment [after the fatigue of his journey?] until he had learned the status of the case. The Gaon advised him to carry his grievance before the King. He did so, and the King sent for Rabbi Sa'adyah to render judgment in the matter. The Rabbi proposed to put them through the blood-ordeal. Accordingly he had them bled, the blood being let into two separate vessels. Then he ordered that the bones of the claimant's father be fetched and that the bones of some other dead man be procured. First he dipped the bone from the stranger's body into the blood of each, but no visible effect being produced, he proceeded to dip the father's bones into the blood of the rightful son. The bone became red and speedily absorbed the blood, since *father and son are one flesh*. Of course, the slave was compelled to refund him his patrimony.

A similar story, minus the blood-test, is known to the ancient Rabbis. In all likelihood, it has served as the basis of all the above accounts, and it is not at all irrelevant to collate these older parallels with the later, more elaborate, versions. In the Babylonian Talmud, tract *Baba Bathra*, f. 58^a, we read the following story:

"A man once overheard his wife telling her daughter that, though she had *ten* sons, only one of them could fairly claim her husband as his father. After the father's death it was found that he had bequeathed all his property to one son, but that the testament did not mention his name. The question therefore arose, which of the ten was intended? They repaired one and all to Rabbi Benaah and asked him to arbitrate among them. "Go," said he to them, "and beat at your father's grave, until he rises to tell you to which of you it was that he left the property."¹

All except one did so; and because by so doing he showed most respect for his father's memory, he was presumed to be

¹ This episode reminds one strongly of the judge's advice in Lessing's admirable parable of the three rings in his *Nathan der Weise*—many analogues of which are known in Oriental folklore (see Steinschneider's notes in the *Zeitschrift für hebräische Bibliographie*, Frankf. a. M., 1902).

the one on whom the father had fixed his affections; he, accordingly, was supposed to be the one intended, and the others were, therefore, excluded from the patrimony”

(English translation in P. I. Hershon's *A Talmudic Miscellany*, London, 1880, p. 142, no. 29; poetic paraphrase in German by Eduard Jacobson in J. H. Jacobson's *Rimmonim*, Breslau, 1887, pp. 253-254. A Judæo-German version is printed in the famous *Me'asebuch*, no. 128; see Steinschneider in *Sera-peran*, 1864, p. 71, and 1866, p. 11; Dukes in *ha-Lebanon* (Jerusalem), vol. v., p. 150 and data in *Hebräische Bibliographie*, xiii (Berlin, 1873), p. 133).

As a somewhat remote, though none the less striking parallel to this cycle of legends concerning disputed legacies, may be cited the curious fable of the son with two heads [reminiscent of the Argus myth?], claiming a double portion of his patrimony, recorded by the Tosafists in *Menahoth* 36^a, and reprinted in full in Farhi's *עשה פלא*, Livorno, 1869, i., pp. 21^a-21^b and in Jellinek's *Bet ha-Midrash* (Leipzig, 1857), vol. iv., pp. 151-152. It is too lengthy to be reproduced in full.

Joseph Zabara, in his *Book of Delight* ("Sefer Sha'ashuim"), finished ca. 1200¹), has still another version of the old Rabbinic story:

" A merchant of wealth untold had an only son, who, when he grew up, said: 'Father, send me on a voyage, that I may trade and see foreign lands, and talk with men of wisdom and learn from their words.' The father purchased a ship and sent him on a voyage with much wealth and many friends. The father was left at home with his slave in whom he put his trust. Suddenly a pain seized him in the heart, and he died without directing how his property was to be divided. The slave took possession of everything; no one in the town knew whether he was the man's son or not. Ten years passed, and the real son returned, with his ship laden with wealth. As they neared the harbor, the ship was nearly wrecked. They cast everything overboard, but in vain; the crew were all thrown into the sea. The son reached the shore destitute and returned to his father's house; but the slave drove him away, denying his identity.

¹ See about him and his interesting book of legends, the luminous paper by Israel Abrahams in the *Jewish Quarterly Review* (London, 1894), vol. vi., pp. 502-532.

They went before the judge. 'Find the merchant's grave,' he said to the slave, 'and bring me the dead man's bones. I shall burn them for his neglect to leave a will, thus rousing strife as to his property.' The slave started to obey, but the son stayed him. 'Keep all,' said he, 'but (disturb) not my father's bones.' 'Thou art the son,' said the judge; 'take this other as thy life-long slave.'"

(Abrahams' transl., *l. c.*, p. 521; Hebrew text in J. Bril's *Jen Libanon*, Paris, 1866, pp. 16-17, and German transl. in Winter and Wuensche's *Jüdische Literatur seit Abschluss d. Kanons*, vol. iii., Berlin, 1897, pp. 148-149.)

For Indian analogues and other bibliographic data see Steinschneider in *Hebr. Bibl.*, xiii., 133. He maintains that this cycle of stories are all based, more or less, upon the "Judgment of Solomon,"¹ which, according to Professor Graetz and Mr. Joseph Jacobs (see the latter's *Studies in Biblical Archaeology*, London, 1893(?)), are of Indian origin.

A modern setting of the Rabbinic story is to be found in G. Ben Levi's *Les Matinées du Samedi* (French), an English translation of which by A. Abraham appeared in London, in 1846, under the title: *Moral and Religious Tales for the Young of the Hebrew Faith* (see pp. 90-92).

Postscript.

After the above was in type, my attention was called to the fact that the story of the blood-ordeal is also mentioned in the *Sefer ha-Zekira* edited by Rabbi זכרי מפלוגניאן, towards the end. See also Abraham Levinson's מקורי מנהגים, ed. Berlin, 1846, § 98.

¹ See, however, his *Hebr. Uebersetzungen* (Berlin, 1893), p. 936, note 221.

*The So-called Intransitive Verbal Forms in Hebrew.*¹—By Dr.
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Md.

IN English grammar, and in Indo-European grammar in general, a transitive verb is one that takes a direct object upon which the action denoted by the verb is exerted, e. g., *kill*; *the man killed his brother*, while an intransitive verb is one that has not such an object, e. g., *sleep*; *the man sleeps*.²

In Semitic grammar there is more or less confusion in the use of the terms transitive and intransitive. They may refer, as in Indo-European grammar, to the exercise or non-exercise of the action upon an object,³ to the special forms of the two classes of verbs,⁴ or, finally, to the meaning of these verbs.⁵ This confusion is due to a characteristic peculiarity of the Semitic languages, namely that transitive and intransitive verbs are usually distinguished by a difference of form.⁶

Semitic verbs are practically all derived from stems containing either two or three consonants. The prevailing type of verb is the triconsonantal, e. g., Heb. *כָּטַל*, and to this norm the biconsonantal verbs have been for the most part conformed,

¹ The present article is a portion of a larger work on the *Intransitive Verbal Forms in Semitic*. The complete material in Syriac, Arabic, Ethiopic and Assyrian is reserved for future publication.

² Cf. J. A. H. Murray, *A New English Dictionary*, Oxford, 1888—, vol. 5, p. 435b; *The Century Dictionary*, New York, pp. 3162b, 6483a.

³ Cf. Wright, *Comparative Grammar of the Semitic Languages*, Cambridge, 1890, p. 165; Gesenius-Kautzsch, *Hebrew Grammar*, Oxford, 1898, p. 120, § 43, a, b; Wright-DeGoeje, *A Grammar of the Arabic Language*, Cambridge, 1896, vol. 1, p. 30; Socin, *Arabic Grammar*, Berlin, 1895, p. 25 f.; Nöldeke, *Syrische Grammatik*,² Leipzig, 1898, § 160.

⁴ Cf. Nöldeke, *op. cit.*, loc. cit.; Dalman, *Gram. d. jüdisch-palästinischen Aramäisch*, Leipzig, 1894, p. 199; Socin, *op. cit.*, loc. cit.

⁵ Cf. Gesenius-Kautzsch, *op. cit.*, loc. cit.; Delitzsch, *Assyrian Grammar*, Eng. ed., Berlin, 1889, p. 233; Barth, *Die Nominalbildung in d. semitischen Sprachen*, Leipzig, 1889, p. xv.

⁶ Cf. Steintal-Misteli, *Charakteristik d. hauptsächlichsten Typen d. Sprachbaus*, Berlin, 1893, p. 458.

either by doubling the second stem consonant, verbs mediae geminatae, e. g., Ar. *حَمَّ* *hamma* < **hana*; or by lengthening the vowel between the two stem consonants, verbs mediae infirmae, e. g., Ar. *قال* *qala* < **qala*.¹ From every stem, triconsonantal or biconsonantal, may be made a number of forms or conjugations, the simple conjugation with simple verbal meaning, and a number of derivative conjugations, intensive, causative, reflexive, etc., and in every conjugation there are two so-called tense forms, a perfect and an imperfect, from which latter an imperative is derived. In the simple conjugation there are two verbal types, one of which is prevailingly transitive and the other prevailingly intransitive.

The difference between these two formal types lies in the so-called characteristic vowel between the second and third stem-consonants in triconsonantal stems, or between the two stem-consonants of biconsonantal stems. In general, transitive verbs have a characteristic *a* vowel in the perfect, and a characteristic *i* or *u* vowel in the imperfect, while intransitive verbs have characteristic *i* or *u* vowels in the perfect, and a characteristic *a* in the imperfect. In Hebrew and Syriac (according to the Nestorian pronunciation) characteristic *i* and *u* are lengthened to *ē* and *ō* respectively; in Ethiopic both become *ē*, which is synepated in the perfect.² These two verbal types exist in all the Semitic languages except Assyrian, where the perfect, as such, has not been developed, and where the various characteristic vowels do not seem to have been used to differentiate between transitive and intransitive verbs,³ e. g.:

¹ Cf. A. Müller, *Verba*, י"י and י"י, ZDMG., 33, p. 698; Lagarde, *Übersicht über d. im Aramäischen, Arabischen u. Hebräischen übliche Bildung d. Nomina*, Göttingen, 1889, pp. 12, 27; Gesenius-Kautzsch, *Hebr. Gr.*, pp. 181, 201; Stade, *Lehrbuch d. Hebr. Gram.*, Leipzig, 1879, § 143, 2; Nöldeke, *Syr. Gr.*² § 177; Hommel, *Süd-arabische Chrestomathie*, München, 1893, p. 31, § 51.

² Cf. Wright, *Comp. Gram.*, pp. 83, 84; Dillmann-Bezold, *Gram. d. äthiopischen Sprache*, Leipzig, 1899, § 19. The statement as to the *i* vowel in Syriac is given on the authority of Rev. Gabriel Oussani of Bagdad.

³ Compare the transitive verbs *imhaç*, *imahaç* 'strike'; *iškun*, *išakan* 'put'; *iddin*, *inadin* 'give'; *irmuk*, *iramuk* 'pour out, wash'; *išbir*, *išabir* 'break in pieces'; with the intransitive verbs *ipšaḥ*, *ipašaḥ*.

Heb. *tr.* פָּקַד, יִפְקֹד 'visit;'

נָתַן, יִתֵּן (< *intēn*) 'give;'

intr. כָּבֵד, יִכְבֵּד 'be heavy;'

קָטַן, יִקְטַן 'be small;'

Syr. *tr.* ܩܬܠ ܩܬܠܐ, ܩܬܠܐ 'kill;'

ܒܝܝܢ ܒܝܝܢ, ܒܝܝܢ 'buy;'

intr. ܢܕܡܢ ܢܕܡܢ, ܢܕܡܢ 'sleep;'

Ar. *tr.* قتل *qatala*, يقتل *yaqtulu* 'kill;'

ضرب *ḍaraba*, يضرب *yaḍribu* 'strike;'

intr. فرح *fariḥa*, يفرح *yafraḥu* 'rejoice;'

حسن *ḥasana*, يحسن *yaḥsinnu* 'be handsome;'

Eth. *tr.* ቀተሰ: *qatala*, ይቀተሉ: *ṣeqtēl* 'kill;'

intr. ደብሰ: *ḥabsa*, ይደብሱ: *ṣēḥbas* 'be dry.'

In the biconsonantal verbs the two types are by no means so distinct, transitive and intransitive forms being more or less confused: cf. however,

Ar. *tr.* قال *qāla*, يقول *yaqūlu* 'say;'

سار *sāra*, يسير *yasīru* 'journey;'

مد *madda*, يمد *yamuddu* 'draw, pull;'

intr. خفت *ḥifta*, يخاف *yaḥāḏfu* 'fear;'

يحم *yaḥammū*, 'be hot.'

'recover, get well;' *ikerub*, *ikarab* 'be propitious;'; *uriq* (*liriq*). *urraq* 'be or become pale;'; *ibluṭ*, *ibaluṭ* 'live;'; *irpiš*, *irapiš* 'be or become wide.' The permansive, which corresponds to the perfect, has practically always characteristic *i* or *u* vowels, e. g., *marīṣ*, *maruṣ* 'be sick' (cf. however, McCurdy, *The Semitic Perfect in Assyrian*, *Actes du VI. Cong. internat. des Orientalistes*, Leide, 1884, p. 524), and regularly denotes condition or passivity.

¹ As the *u* perfect type of the intransitive verb is practically extinct in Syriac, and in Ethiopic has fallen together with the *i* type, it is difficult to say what was the original characteristic vowel of the imperfect, *a* as in Hebrew, or *u* as in Arabic.

The terms transitive and intransitive are also applied in Semitic to the nominal forms, but here again they are ambiguous. Sometimes they refer to the meaning of the words as being similar in kind to the meanings of verbs of the transitive or intransitive types,¹ e. g.

Hebr. *tr.* הָרַג *pt.* 'killing,' cf. הָרַג 'kill;'

intr. כָּבֵד 'heavy,' cf. כָּבֵד 'be heavy.'

Sometimes they are used as indicating the derivation of a nominal form from a transitive or intransitive verbal form without regard to meaning,² e. g.

Hebr. *tr.* יָשַׁר 'straight' from יָשַׁר 'be straight,'

intr. כָּבֵד 'heavy' from כָּבֵד 'be heavy.'

The nominal forms in Semitic are usually regarded as derived from the verb. Lagarde derives practically all nouns from the perfect theme; Barth, part from the perfect and part from the imperfect theme. Hence both consider the vocalization of a noun as an indication of the original vocalization of the verbal forms of the same stem.³ There is no reason, however, for assuming such a close connection between all nominal and verbal forms. It is hardly probable that the large number of nominal forms should be derived from the few themes which occur in the verb. Moreover, these theories leave out of consideration entirely the influence of analogy in conforming words of related meaning to the same formal type.⁴

Although it is hardly possible, therefore, to assume, in the mechanical manner of Barth and Lagarde, that a verbal form had originally such and such a characteristic vowel, because that vowel is found in its nominal derivatives, it is true, nevertheless, that many verbal nouns and adjectives do offer more or less certain evidence as to the original form of a verb. These nominal derivatives are of two kinds, viz.

¹ Cf. Barth, *Nominalb.*, pp. ii, iii, iv, ix.

² Cf. Barth, *op. cit.*, p. xxviii.

³ Cf. Lagarde, *Übers.*, p. 27 ff.; Barth, *op. cit.*, p. xxii. ff., especially xxiv.

⁴ Cf. Huizinga, *Analogy in the Semitic Languages*, Baltimore, 1891, p. 32 f.

1) Those in which there is an organic connection between verbal and nominal forms, as, for example, verbal adjectives of the forms *qatil* and *qatul*, which are probably originally identical with the corresponding *i* und *u* perfects;

2) Those which, although there is probably no original organic connection, are made more or less exclusively from either transitive or intransitive verbs; for example, active participles of the form *qatil* may be considered specifically transitive, abstracts of the form *qatul* specifically intransitive.

The designations transitive and intransitive as applied in Semitic to the two formal verbal types and their derivatives are not entirely suitable. In the first place, the distinction between transitive and intransitive is, strictly speaking, purely grammatical and syntactical, and has *per se* nothing to do with the meaning of the verb. In the sentences, *he kills simply for the pleasure of killing; he is writing; he knows if anyone knows; I can't see*: the meaning of the intransitively used verbs *kill, write, know, see*, is the same as in the sentences *he kills animals simply for the pleasure of killing; he is writing a letter; he knows it if anyone knows; I can't see him*; where they are used transitively.¹

Secondly, the two classes of transitive and intransitive verbs are not coextensive with the two formal verbal types. Although a large majority of the verbs of the so-called intransitive type are intransitive, there are a number, especially those which denote emotions and actions of the mind, which govern a direct object, e. g., Heb. אָהַב 'love,' שָׂנֵא 'hate,' שָׁמַע 'hear,' etc.; while many verbs of the so-called transitive form, especially verbs of motion, are intransitive, e. g., Heb. יָצָא 'go out,' כָּרַע 'kneel down,' נָפַל 'fall,' etc. These numerous exceptions can not be satisfactorily explained as due simply to a mixture of transitive and intransitive forms: the real difference between the two verbal types is to be sought, not in the grammatical construction, but in the signification of the verbs.

The inadequacy of the terms transitive and intransitive has been very generally recognized, and various names for the two

¹ It is quite possible that originally all verbs were intransitive, indicating a condition or action of the subject without special regard to any object. Cf. Bréal, *Essai de Sémantique*, Paris, 1897, p. 210.

classes of verbs have been proposed with the idea of defining their nature more accurately. Böttcher calls the two classes *activa* and *stativa*; König employs the term *Zustandsverba* for verbs of the second class, while Gesenius designates them as verbs of "quality and emotion," or as verbs which denote "states and qualities," and in Lee's *Grammar of the Hebrew Language* they are spoken of as verbs of "sense and habit." Ewald uses the terms *active* and *halfpassive* to designate the two classes: Rosenmüller calls them *activa* and *absoluta*; Merx speaks of verbs of the second class as *descriptiva*, Duval as *neutres*. All of these terms point more or less clearly towards the distinction made by Böttcher, viz., that verbs of the first class indicate actions, while those of the second class indicate states or conditions.¹

Professor Haupt has suggested another theory. He calls the first and second classes respectively "voluntary" and "involuntary," or *verba voluntaria* and *verba involuntaria*, and thinks that the original distinction was one between volition and non-volition, verbs of the first class indicating originally an action or state which depends on the will of the subject, e. g., *kill, cut, look, walk*, etc., those of the second class indicating an action or state which does not depend on the will of the subject, e. g., *see, hear, fear, love*, etc.²

The following investigation comprises a study of the meaning and form of the so-called intransitive verbs in Hebrew, the term intransitive being used with reference to form only, unless otherwise stated. In the case of the nominal derivatives the term intransitive is restricted to those which are intransitive in the sense of the two categories given above. The investigation is divided into three parts:

¹ Cf. Böttcher, *Ausführliches Lehrb. d. Hebr. Spr.*, Leipzig, 1866, §§ 508, 564, 908; König, *Lehrgebäude d. Hebr. Spr.*, Leipzig, 1881, 1, 167; Gesenius, *Lehrgebäude d. Hebr. Sprache*, Leipzig, 1817, p. 231; Gesenius-Kautzsch, *Hebr. Gr.*, p. 120; Lee, *Grammar of the Hebrew Lang.*, London, 1844, p. 182, ft. nt.; Ewald, *Ausf. Lehrb. d. Hebr. Spr.*, 8te Ausg., Göttingen, 1870, p. 338; Rosenmüller, *Institutiones ad Fundamenta Linguae Arabicae*, Lipsiæ, 1818, p. 59; Merx, *Gram. Syriaca*, Halis, 1867, p. 212; Duval, *Traité de Grammaire Syriacque*, Paris, 1881, p. 176.

² Cf. Haupt, *Transitive and Intransitive Verbs in Semitic*, PAOS., 1894, p. ci. f.; cf. also Lagarde, *Übers.*, p. 6; Reckendorf, *Die Syntaktischen Verhältnisse d. Arabischen*, Leiden, 1898, p. 40.

verbs ל"ה; verbal nouns of the forms קַטֵּל, קִטְלָה, קִטְלָה, קִטְלָה, קִטְלָה.¹

In the following list, all those stems will be given which exhibit decisive intransitive verbal forms or intransitive derivatives. Verbs ל"ה without intransitive derivatives which exhibit intransitive forms in the perfect or imperfect, and verbs mediæ and tertiæ gutturalis which have no intransitive form except the imperfect or imperative, are given when the evidence of the cognate languages seems to show that the intransitive forms are original. All the intransitive forms in Hebrew will be given in the case of each verb in the order, perfect, imperfect, imperative, infinitive, adjective, abstract, except in verbs ל"ה, where perfect forms like נָלִיתָ and imperfect forms like נִלֵּה are simply indicated by *pf.* and *impf.* respectively. Whenever a stem presents intransitive form in only a single instance, a reference to the Hebrew text is added; references are also given in other cases when it seems desirable. Decisive intransitive forms of the verbs in the cognate languages are given in the perfect when it occurs; if not, in the imperfect, in Ethiopic the subjunctive. Forms in Talmudic and Targumic Aramaic are given only when no decisive intransitive form, or when only the imperfect is found in Syriac, J., L. and T. indicating respectively that the intransitive form in question is given by Jastrow in his Targumic and Talmudic dictionary, by Levy in his Talmudic dictionary, or by the same author in his Targumic dictionary. As indecisive forms in the cognate languages are to be regarded, 1) *a* imperfects of verbs mediæ and tertiæ gutturalis in Syriac and Arabic, and *a* subjunctives of verbs of the same classes in Ethiopic,² 2) *a* imperfects of verbs tertiæ *resh* in Syriac,³ 3) syncopated per-

¹ No other nominal form can be regarded as specifically intransitive in the sense here employed. On the other hand, adjectives of the form קַטֵּל like חָכֵם 'wise' seem to indicate the existence of *a* perfects with meanings like the *i* and *u* perfects, just as adjectives of the forms קִטְלָה and קִטְלָה indicate the existence of *i* and *u* perfects.

² Cf. Nöldeke, *Syr. Gram.*,² §§ 169, 170; Wright-DeGoeje, *Arab. Gram.*, vol. 1, § 91, rem. *a*; Dillmann-Bezold, *Gram. d. äthiop.-Spr.*, p. 161.

³ Cf. Nöldeke, *op. cit.*, § 170.

4. אָגַם* (*a.* אָגַם; אָגַם¹ 'sad,' Is. xix. 10).
5. אָדַם (*a.* אָדַם; אָדַם 'aduma, 'adima) 'be red.'
6. אָהַב (*a.* אָהַב, אָהַב, *inf.* and *abst.* אָהַב 'love.'
7. אָזַר (*a.* אָזַר, אָזַר, *imp.* אָזַר 'become bright.'
8. אָחָה* (אָחָה) 'brotherhood,' Zech. xi. 14).
9. אָטַר (אָטַר) Ps. lxix. 16) 'shut.'†
10. אָיַם* (*a.* אָיַם 'terrible').
11. אָכַל ('eat.')
12. אָלַף (אָלַף) Pr. xxii. 25; J. L. T. אָלַף; אָלַף 'alifa 'be accustomed to' 'learn.'†
13. אָמַן (*a.* as *adv.* אָמַן 'so be it,' אָמַן, אָמַן, אָמַן 'amina 'be safe, secure;' אָמַן; אָמַן) pt. 'tutor.'
14. אָמַץ (אָמַץ) (*a.* אָמַץ, אָמַץ, אָמַץ) 'be powerful, courageous.'
15. אָמַר ('say.')
16. אָנַח* (אָנַח) 'sighing;' Ass. *ānāḥ*.
17. אָנַף (אָנַף) 'anifa 'be angry.'
18. אָנַק (אָנַק) 'groan.'
19. אָסַף (אָסַף) Is. xxiv. 22), 'collect.'
20. אָפַל* (*a.* אָפַל 'dark,' אָפַל; אָפַל).
21. אָפַם ('stop, be no more.')
22. אָרַך* (אָרַך) Ezek. xxxi. 5, *a.* אָרַך, אָרַך, אָרַך 'become long.'
23. אָשַׁם (אָשַׁם) (*a.* אָשַׁם, אָשַׁם, *inf.* and *abst.* אָשַׁם 'athima) 'be guilty.'

¹ אָגַם might also be derived from a form אָגַם, just as חָכְמִי from חָכַם 'wise.'

² Denominative from אָח 'brother.'

³ Perhaps to be read אָטַם, cf. Graetz, *Commentar*, Breslau, 1883, p. 423.

⁴ Cf. p. 200.

24. אתה (יֵאתָי) : ē'tay 'come.'
25. באש (יֵבֵאשׁ) : ba'isa ; bē'sa 'rot, stink.'
26. בנר (נִבְנָר) Mal. ii. 10, *a.* בְּנָר * Jer. iii. 7, 10 'be faithless, rebellious.'
27. בדר (בָּדַר 'separation;') bādāru 'have parts far apart') *pt.* 'alone, separate.'
28. בהם (בְּהֵמָה 'cattle;') bēhuma 'be dumb').
29. בוא (יֵבֹוא, *impr.* and *inf.* בּוֹא : ibā ; Ass. ibā'u) 'enter, come.'
30. בוש (בִּשְׁתִּי בֹשׁ, *impr.* and *inf.* בּוֹשׁ, *a.* בֹּשׁ ; ibāš ; Ass. ibāš) 'be ashamed.'
31. בחן (יֵבַחן) bāḥan *s., a.* Jer. vi. 27 'test, try.'
32. בטח (יֵבַטח) Is. xxx. 15 'trust.'
33. בלה (יֵבַלָה, *a.* balā ; balia ; balā ; balia) 'become worn out.'
34. בלע (יֵבַלַע) bali'a 'swallow.'
35. בעל (יֵבַעַל) ba'ula ; bē'la 'rule over, possess.'
36. בער (יֵבַעַר) J. בעיר 'burn' *intr.*
37. בעת (יֵבַעַת) 'terror;') bē't 'come upon suddenly, fear').
38. בצק (יֵבַצֵּק, *a.* bāzāq 'dough,' originally 'swelling up') 'swell up.'
39. ברר (יֵבַרֵּר) bariḥa 'depart, leave') 'flee.'
40. ברח (יֵבַרַח) Ch. vi. 13 ; bariḥ 'kneel.'
41. ברך (יֵבַרֵּךְ) Jer. iii. 17 ; bariḥ 'pool,' perhaps originally 'something blessed') *inf. absolute.*

¹ The retention of the *Qameç* in the feminine is strange if the form is *qatul* or *qatāl*. Barth (*Nominalbildung*, §27g) derives it from *qatāl*. It may be the Aramaic form קטול (so Haupt).

43. כָּרַר (*inf.* לְכָרַם *כֵּר, Eccl. iii. 18, *a.* כָּר 'pure; בִּרְרָה *barirta* 'be good, true') 'separate, cleanse.'
44. כָּשַׁל (*a.* כָּשַׁל; כָּשַׁל) 'become cooked, ripe.'
45. גָּאָה (*impr.*, גָּאָה; גָּאָה) 'rise, be exalted.'
46. גָּבַהּ (*inf.* גָּבַהּ, *a.* גָּבַהּ) 'be high, exalted, proud.'
47. גָּבַר (*inf.* גָּבַר; גָּבַר: *gabra* 'do, make') 'increase, become great.'
48. גָּדַל (*s.* גָּדַל, *a.* גָּדַל, *a.* גָּדַל; גָּדַל *gadila* 'contend violently') 'become great.'
49. גָּהַר (*inf.* גָּהַר; גָּהַר) 'bend down.'
50. גָּוַר (*a.* גָּוַר) 'sojourn.'
51. גָּזַל (*a.* גָּזַל, 'plunder,' originally 'what is torn off,' גָּזַל; גָּזַל *jazila* 'be cut on the back [of camel]) tear off, tear away.'
52. גָּזַר (*inf.* גָּזַר; גָּזַר Job xxii. 28, גָּזַר) 'desolation') 'separate, determine.'
53. גָּחַ and גָּחַ (*impr.* גָּחַ Mic. iv. 10) 'break forth.'
54. גָּלַל (*impr.* גָּלַל Ps. cxix. 22) 'roll.'
55. גָּנַב (*inf.* גָּנַב; גָּנַב Ex. xxii. 2) 'steal.'
56. גָּעַר (*inf.* גָּעַר; גָּעַר) 'scold, reprove.'
57. גָּרַר (*inf.* גָּרַר; גָּרַר Lev. xi. 7) 'draw.'
- ** Cf. No. 433.
58. רָאָה (*inf.* רָאָה; רָאָה L. רָאָה) 'fear.'
59. רָבַל (*inf.* רָבַל; רָבַל Eccl. i. 6, originally 'something pressed together,' רָבַל *dabila* 'be full of fat').
60. דָּבַק (*inf.* דָּבַק; דָּבַק, *a.* דָּבַק; דָּבַק *dabika*) 'stick to.'
61. דָּוָה (*a.* דָּוָה; דָּוָה; דָּוָה *dayia*; דָּוָה *iedayai*) *inf.* Lev. xii. 2, 'be unwell, menstruate.'
62. דָּוַן (*inf.* דָּוַן; דָּוַן Gen. vi. 3) 'stay' [?].

¹ Cf. Wright, *Comp. Gram.*, p. 67.

² Cf. Stade, *Lehrb.* § 490, c; Olshausen, *Lehrb.* p. 524 bot.

63. דוּש (*impr.* דוּשִׁי Mic. iv. 13) 'tread down.'
64. רֹכַךְ* (א. רָךְ 'crushed').
65. דָּלַל (דָּלֹה) Job xxviii. 4) 'dangle.'†
66. דָּלַל (דָּלֹה) דָּל, א. דָּל 'be weak, poor.'
67. דָּלַק (דָּלִיק) Ps. x. 2; נִהְלַק נֶחֱפַץ, J. דָּלִיק 'burn *intr.*, pursue eagerly.'
68. דָּמָם (דָּמָה) Job xxx. 27, דָּמָמָה 'be silent, still.'
69. דָּמַע (דָּמָע) Jer. xiii. 17, דָּמָעָה; دَمِعَ *damī'a* 'weep, be full of tears.'†
70. דָּעַךְ (דָּעָה) יָצָא; דָּעָה יָצָא 'go out, be extinguished.'
71. דָּקַק (דָּק) א. דָּק 'be crushed, fine'.
72. דָּשֵׁן (דָּשֵׁן) Dent. xxxi. 20, א. דָּשֵׁן; دَسِمَ *dasima*¹ 'become fat.'†
73. הִבֵּל (יִהְיֶה) T. הִבֵּל 'amount to nothing, give oneself up to empty hopes.'
74. הָרַר (הָרָה) הָרָה, הָרָה, הָרָה 'honor, take the part of.'
75. הָלַךְ (forms regularly *tr.* except *impr.* i. p. הָלַךְ, 2 pl. תִּהְלַךְ Ex. ix. 23, Ps. lxxiii. 9; J. T. הָלִיךְ هَلِكُ *haliku* 'perish') 'go, walk, depart, vanish.'
76. הָפַךְ (הִפְכָה) 'destruction,' Gen. xix. 29; J. T. הִפִּיךְ 'turn, overturn, destroy; turn (*intr.*), flee.'
77. הָרַג (הָרָה) 'slaughter' 'kill.'
78. הָרָה (*impr.*, א. הָרָה* הָרָה) 'be pregnant.'
79. זָוַר (א. זָוַר) 'be haughty.'
80. זָוַע (זָוַע) זָוַע *kt.*, transposed זָוַע 'tremble, be afraid.'
81. זָוַר (זָוַר) Jud. vi. 38) 'press out.'
82. זָוַר (זָוַר) Ps. lviii. 4) 'be strange, apart, rebellious.'
83. זָכָה (*impr.*; זָכָה) 'be pure.'

¹ Cf. Haupt in *Beiträge zur Assyriologie* 1, 2.

84. זָכַר (זָכַר, *a.* זָכַר) 'be pure, innocent.'
85. זָעַף (זָעַף Pr. xix. 3, *a.* זָעַף) 'be angry.'[†]
86. זָעַק (זָעַק, זָעַק, זָעַקָה; *Bib. Ar.* זָעַק) 'cry out.'
87. זָקַן (זָקַן, זָקַן, *inf.* and *abst.* זָקַנָה, *a.* זָקַן) 'become old.'
88. זָרַר (זָרַר Is. i. 6) 'be pressed out.'[†] [Cf. 81.]
89. חָבַר (*a.* חָבַר, חָבַרָה; חָבַר חֲבֵירָה *habura* 'know'; חָבַר חֲבֵירָה *habra*) 'be joined together, allied.'
90. חָבַשׁ (חָבַשׁ Job v. 18) 'bind.'
91. חָגַר (*a.* חָגַר *חָגַר 'girded,' Ezek. xxiii. 15) 'gird, bind up.'
92. חָרַר (חָרַר Hab. i. 8, *a.* חָרַר 'sharp') 'be sharp, quick.'[†]
93. חָרַה (חָרַה חָרַה) 'rejoice.'
94. חָרַל (חָרַל, חָרַל, *a.* חָרַל) 'cease.'
95. חָוַם (חָוַם) 'pity, spare.'
96. חָוַר (חָוַר Is. xxix. 22; חָוַר *hayira*) 'become pale.'[†]
97. חָזַק (חָזַק, חָזַק, *inf.* and *abst.* חָזַקָה חָזַקָה, *a.* חָזַק) 'be unmoved, attached to, strong.'
98. חָטָא (חָטָא, חָטָאָה; חָטָא חָטָאָה *ḥaṭi'a*) 'sin.'
99. חָיָה (חָיָה *pf. impf.*, *a.* חָיָה *חָיָה Ex. i. 19; חָיָה *ḥaiya*; חָיָה *ḥaiya*) 'live.'
100. חָיָה (חָיָה, *a.* חָיָה; חָיָה *ḥaiya*) 'live.'
101. חָכַם (חָכַם, חָכַם, חָכַם; חָכַם נֶחֱכָם *J.* חָכַם) 'be wise.'
102. חָלַק (חָלַק *חָלַקָה; חָלַק חָלַק *ḥaliqa, ḥabuqa*) 'be smooth.'
103. חָלַשׁ (חָלַשׁ Job xiv. 10; T. חָלַשׁ) 'be weak.'[†]
104. חָמַד (חָמַד J. חָמַד; חָמַד *ḥamidu*) 'praise' 'desire.'
105. חָמַל (*inf.* or *abst.* חָמַלָה and חָמַלָה) 'pity, spare.'

¹ All the forms are probably denominative from זָקַן 'beard.'

² Regarded as *Pual* of זָרַר by Stade, *Lehrb.* §415, b.

³ Meaning uncertain, usually translated 'lively, in good health.'

106. חָמַם (חָם, יָחַם, יָחַם, *inf.* לְחַמֵּם¹ Is. xlvii. 14, *a.* חָם; נָחַם לִסְחָם; حَمَمَ *hamimta*; חָמַם *hamma*) 'become warm.'
107. חָמַם (חָמַם; حَمَسَ *hamisa* 'be hard, severe') 'act violently to, harm.'
108. חָמַץ (חָמַץ, יָחַץ, *inf.* חָמָץ* Hos. vii. 4, *a.* נָחַץ; حَمَضَ *hamida, hamula*; cf. نَحَسَ *hami*, L. חָמַץ) 'be sour.'
109. חָמַץ (*a.* חָמוץ 'oppressor,' Is. i. 17) *pt.* 'oppressor,' Ps. lxxi. 4.
110. חָנַן (יָחַן Am. v. 15, *inf.* חָנַן* Is. xxx. 18) 'be gracious to.'
111. חָנַף (חָנַף, יָחַף, *a.* חָנַף; حَنَفَ *hanifa, hanifu* 'have a contortion') 'be godless, polluted.'
112. חָסַן (*a.* חָסֵן 'strong,' חָסַן; حَصَنَ *hasana*).²
113. חָסַר (יָחַס, יָחַס, *a.* חָסַר; خَسِرَ *hasira*; حَاسَرَ *hasra*) 'fail, be in want, decrease.'
114. חָפַף (*a.* חָף 'pure,' Job xxxiii. 9).
115. חָפֵץ (יָחַץ, יָחַץ, *a.* חָפֵץ; حَفِظَ *hafiza* 'keep') 'be pleased with, desire.'
116. חָפַר (יָחַר, יָחַר; خَفِيَ *hafira*; حَافَرَ *hafra*) 'be ashamed.'
117. חָפַשׁ (חָפַשָׁה) 'freedom,' Lev. xix. 20).
118. חָצַב (חָצַב Is. v. 2) 'hew, split.'
119. חָרַב (יָחַר, *impr.* חָרַב Is. xlv. 27, *a.* חָרַב; حَرِبَ *hariba*) 'be dry, desolate.'

¹ Perhaps corrupt and to be read לְחַמֵּם *inf.* with suffix, or *Piel* לְחַמֵּם; cf. Gesenius-Buhl., p. 260 b.

² The regular representative of חָמַץ in Syriac is حَمَضَ 'be fermented,' the *a* imperfect of which is indecisive.

³ Cf. Haupt in *Beiträge zur Assyriologie*, 1, 19; Lagarde, *Übersicht*, p. 34.

120. חרר (יִחַרֵּר), *a.* חָרַר, חֲרָרָה; خرد *harida* 'be bashful'
'tremble.'
121. חרף (יִחַרֵּף) Is. xviii. 6) 'pass the winter.'[†]
122. חרף (יִחַרֵּף) Job xxvii. 6, חֲרָפָה; T. יִחַרֵּף 'scorn.'[†]
123. חרץ (יִחַרֵּץ) Ex. xi. 7) 'sharpen.'
124. חרץ (יִחַרֵּץ) 2 Sam. v. 24; حرص *harisa* 'be eager, hasten.'[†]
125. חרר (יִחַרֵּר), *a.* חָרַר * חֲרָרִים 'dry regions,' Jer. xvii.
6; حررت *harirta* 'burn, glow.'
126. חרש (יִחַרֵּשׁ) חֲרָשׁ; خرس *harisa*¹ 'be dumb,
silent.'
127. חשך (יִחַשֵּׁךְ), *a.* חָשַׁךְ * חֲשֵׁכִים חֲשֵׁכָה; حسك *hasika* 'be angry' 'become darkened.'
128. חתת (יִחַתֵּן), *a.* חָתַת 'be terrified.'
129. טבח (יִטְבַּח) 'slaughtering' 'slaughter.'
130. טבע (יִטְבַּע) طبع *tabi'a* 'be rusty,' امس *am* 'be inborn'
'be sunken, sink.'
131. טהר (יִטְהַר), *a.* טָהַר, טְהָרָה; طهر *talhira*,
talhura 'be clean, pure.'
132. טוב (יִטּוֹב), *a.* טָוֵב, *pf.* טוֹב 'be good.'
133. טחן (יִטְחֹן) טָחַן 'grind.'

¹ The adjective חֲרָשׁ 'dumb' is perhaps modified from חֲרָשׁ* after the analogy of other adjectives denoting defects, e. g. אֵטָר 'lame,' אֵלִם 'dumb,' גִּבַּח 'bald,' גִּבָּן 'humped,' עִוֵּר 'blind,' עֲלִילָה 'stammering,' עֲקִישׁ 'crooked,' פֶּסַח 'lame,' פִּקְחָה 'open-eyed,' קָרַח 'bald.' קָרַח is probably to be regarded in the same way, cf. the proper name קָרַח.

² Considered an *u* perfect by Lagarde (*Übersicht*, p. 26); it is probable, however, that the verbal forms are simply denominative for the adjective, which represents a more original form *ṭāb*, cf. Syr. *ṭāb* *ṭāb*, Ass. *ṭābu*.

134. טַמְאָה, טַמָּא, *a.* טַמְאָה, *inf.* טַמְאָה, טַמְאָת, טַמְאָה טַמָּא;
 طمى *ṭami'a*) 'be unclean, impure.'
135. טַעַם (טַעַם); טַעַם; طعم *ṭa'ima*; טֹעַם: *ṭē'ma*)
 'taste' *tr.*
136. טָרַף (טָרַף) Gen. xlix. 27, טָרַפָּה; طرف *ṭarīfa, ṭarūfa*)
 'tear, rend.'
137. יָבֵשׁ (יָבֵשׁ), *a.* יָבֵשׁ; يابس *yābisa*; يابس: *yābisa*)
 'be dry.'
138. יָגַע (יָגַע), *a.* יָגַע; وجع *yajī'a*) 'be tired.'
139. יָגַר (יָגַר), *a.* יָגַר; جمر *yajira*) 'fear.'
140. יָדַר (יָדַר) 'throw [lot].'
141. יָחַד (יָחַד); واحد *yahida, yahuda*; cf. واحد: *yāḥḥida*)
 'be joined to.'
142. יָחַם (יָחַם) Gen. xxx. 38; وحم *yahima*) 'be lustful, in
 heat.'
143. יָחַף * (*a.* יָחַף 'barefoot').
144. יָטַב (יָטַב); cf. طاب *yāṭab*) 'be good.'
145. יָכַל (יָכַל), *a.* יָכַל; Bil. Ar. يَكَل; cf. هُكِل: *kēhla*)
 'be able.'
146. יָלַד (יָלַד); يَلِد: *ilad* [subj.]) 'bear.'
147. יָלַל * (יָלַל 'cry of woe').
148. יָנַק (יָנַק); cf. يَنُق *yānūq*) 'suck.'
149. יָעַף (יָעַף), *a.* יָעַף; cf. يَئِف *yā'if*) 'be fatigued.'
150. יָפָה (יָפָה), *a.* יָפָה; cf. يَف *yāf*) 'be beautiful.'
151. יָפַח * (*a.* יָפַח 'breathing forth,' Ps. xxvii. 12).
152. יָפַע (יָפַע); cf. يَفَع *yāf'ac*) 'beauty,' Ezek. xxviii. 7, 17).

¹ To be pronounced *ṭvēš*; such forms might also be transliterated *איבש*, just as they are sometimes written in Syriac *ܐܝܒܫ*.

² For *יָחַם*, cf. Gesenius-Kautzsch, § 47, k.

³ Cf. my paper on *The Internal Passive in Semitic*, JAOS. vol. 22, p. 49, ft. nt. 2.

153. יִצֵק (יִצְקָן)¹ 1 Kgs. xxii. 35, *impr.* צָק 2 Kgs. iv. 41) 'be poured out, flow.'[†]
154. יָצַר (יִצְרָה) 'form.'
155. יָצַת (*impr.* יִצֵת) 'burn' *intr.*
156. יָקַר (יִקְרָה; תִּיקַר, יִקְרָה) 'burn' *intr.*
157. יָקָה * יִקְהֶת * יִקְהֶת 'obedience;' *yaqiha* 'be obedient').
158. יָקַע (תִּקַע; *yaqi'a*) 'be dislocated.'
159. יָקַץ (יִקְצָה; יִקְצָה) 'awake.'
160. יָקַר (יִקְרָה; יִקְרָה, *yaqira, yaqura*) 'be heavy, important, precious.'
161. יָקַשׁ (יִקְשָׁה) Jer. l. 24, *a.* יָקַשׁ Hos. ix. 8) 'lay snares.'
162. יָרָא (יִרְאָה; יִרְאָה, *inf.* and *abst.* יִרְאָה, *a.* יִרְאָה) 'fear.'
163. יָרַב (יִרְבָּה) 'contentious,' Hos. v. 13, x. 6).
164. יָרַד (יִרְדָּה) 'descend, go down.'
165. יָרַק (יִרְקָה; יִרְקָה, *a.* יִרְקָה, 'green,' *yaqiya*).
166. יָרַשׁ (יִרְשָׁה; יִרְשָׁה, *impr.* יִרְשָׁה and יִרְשָׁה *s.* יִרְשָׁה, *yaaritha; iras* [subj.]) 'inherit.'
167. יָשַׁן (יִשְׁנָה; יִשְׁנָה, *a.* יִשְׁנָה, *yasina*) 'sleep.'
168. יָשָׁר (יִשְׁרָה; יִשְׁרָה, *a.* יִשְׁרָה, 'straight,' *yasira*) 'be straight.'
169. יָשַׁשׁ (יִשְׁשָׁה; יִשְׁשָׁה, *a.* יִשְׁשָׁה, 'old,' 2 Ch. xxxvi. 17).
170. יָכַב (יִכְבָּה; יִכְבָּה, *ka'iba*) 'feel pain.'
171. יָכַד (יִכְדָּה; יִכְדָּה, *a.* יִכְדָּה, *a.* יִכְדָּה, *kabda*) 'be heavy.'

¹ The unaccented *a.* of the final syllable is modified to Seghol as in יִצְקָן < *iaqimmar*, cf. יִצְקָן i. p. Cf. Gesenius-Kautzsch, *Hebr. Gr.* § 68, c. d. e.

² Daghesh-forte dirimens, cf. Gesenius-Kautzsch, *Hebr. Gr.* § 20, h.

³ If the text is correct, a secondary form based on the imperfect יִרְשָׁה from יָרַב 'contend.'

172. כהה (*impf.*; כהי *kalaija*) 'be weak [of eyes], despair.'
 173. כון* (*a.* כן 'right, proper').
 174. כזב (*כזב*) *pt.* 'lying,' Ps. cxvi. 11.
 175. כלה (*impf.*; *a.* כלה* 'languishing,' Deut. xxviii. 32) 'be complete, ended, languish.'
 176. כסל (*יכסלו*) Jer. x. 8, כסלה; כסל; *kasila* 'be sluggish')
 'be foolish.'†
 177. כעס (*יכעס*; J. כעים) 'be displeased, angry.'
 178. כפן (*כפן*) 'hunger;' כפן כפן 'stretch out hungrily,' Ezek. xvii. 7.†
 179. כרה (*pf. impf.*; כרה: *ḡēkra*) 'dig.'
 180. כשר (*יכשר*) Esth. viii. 5, *יכשר* Eccl. xi. 6) 'succeed, be suitable.'†
 181. לאה (*impf.*; לאי לאי) 'become fatigued, lose courage.'
 182. לבש (*ילבש*, *ילבש*; לבש לבש; *labisa*; *labša*) 'put on.'
 183. להק (*ילהק*) 'frenzy,' 1 Sam. xix. 20;¹ להק *lahika* 'be white, glowing').
 184. לין (*תלין*) Jud. xix. 20, Job xvii. 2, *a.* לין Neh. xiii. 21) 'spend the night.'
 185. ליץ (*a.* ליץ) 'scorn, scoff.'
 186. למד (*יילמד*; T. למיד; *lēmād*) 'learn.'
 187. לעג (*ילעג*) *a.* לעגי* לעג; לעג 'stutter') 'mock.'
 188. לעע (*ילעע*) Job. vi. 3; *ילעע* Pr. xx. 25)² 'speak in a confused manner, speak without thinking.'†
 189. לעע (*ילעע*)³ Ob. 16) 'suck up.'†

¹ Cf. Hoffman, ZAW. 3, 89. The reading is doubtful; according to LXX, Syr. and Targ. we should read קהלה 'assembly.'

² לעע is perhaps to be read לעע, and the forms referred to לעה, Ar. لغا.

³ Perhaps from לויע, cf. Syr. لوع as well as لع.

190. מֵאֵן * (a. מֵאֵן 'refusing;'; מֵאֵן 'refuse').
191. מֵהֵרָה * (מֵהֵרָה 'haste').
192. מוֹט (inf. מוֹט Ps. xxxviii. 17, xli. 3) 'totter.'
193. מוֹת (מֵת, a. מֵת; מֵת מֵת; mitta) 'die.'
194. מוֹה * (a. מוֹה * c. pl. מוֹי 'exhausted [by hunger];' Deut. xxxii. 24).
195. מוֹץ * (a. מוֹץ 'oppressor,' Is. xvi. 4).
196. מֵלֵא; מֵלֵאָה, מֵלֵא; מֵלֵאָמוּ, מֵלֵאָתִי, מֵלֵאָה; מֵלֵא (mal'i'a) 'be or become full.'
197. מֵלַח (מֵלַח Lev. ii. 13, מֵלַח 'salty, unfruitful land;'; מֵלַח mal'ha 'be salty') 'salt' tr.†
198. מֵלֵל (מֵלֵל; מֵלֵל malilta) 'sink down, wither.'
199. מֵסַס (a. מֵסַס * לֵמַס 'unlucky, despairing,' Job vi. 14) inf.[?], Is. x. 18.
200. מֵעַט (מֵעַט; a. מֵעַט * מֵעַט 'smooth;'; מֵעַט ma'ita 'have hair falling out') 'be small in amount, trivial.'
201. מֵקֵק * (a. מֵק 'foulness, mould,' originally 'foul, mouldy').
202. מֵרַח (a. מֵרַח * מֵרַח 'rubbed, crushed,' Lev. xxi. 20) 'rub,' Is. xxxviii. 21.†
203. מֵרַט (inf. מֵרַט Ezek. xxi. 16) 'pluck out, smooth, sharpen.'
204. מֵרָרָה, מֵרָרִים * מֵרָר, a. מֵר, a. מֵר, inf. מֵר, יֵמַר, מֵר; מֵרִיר J. L. T. מֵרִיר; מֵרִיר marirta; מֵרִיר: marra) 'be or become bitter.'

¹ Perhaps to be read חֵמִין or חֵמִין. Cf. Perles, *Analekten z. Text-critik d. Alten Testaments*, München, 1895, p. 69; Duhm, *Das Buch Jesaia*, Göttingen, 1892, *ad loc.*

² May be *Niphal*.

³ This form may be referred to מֵס just as לֵפֶר to פֶּר 'bullock,' the pausal form being used with the article; cf. Gesenius-Kautzsch, *Hebr. Gr.* § 35, o.

205. מִשָּׁח (מִשָּׁח, מִשָּׁח s., *inf.* מִשָּׁחָה) 'anoint.'
206. מִתּוֹק (מִתּוֹק) Pr. ix. 17, a. מִתּוֹק 'be sweet.'
207. נִאָּץ (נִאָּץ, נִאָּץ) 'despise.'
208. נִאָּקָה * נִאָּקָה Job xxiv. 12, נִאָּקָה 'groan.'
209. נָבַל (נָבַל, נָבַל; J. L. נָבַל 'be soiled') 'wither.'
210. נָבַל (נָבַל) 'be foolish, act foolishly,' Pr. xxx. 32.†
211. נָגַה (נָגַה Job xviii. 5, a. נָגַה * נָגַה 'dawn,' originally 'shining,' Is. lix. 9) 'shine.'
212. נִגַּשׁ (נִגַּשׁ, *impr.* נִגַּשׁ) 'approach.'
213. נָדַב (נָדַב 'willingness,' נָדַב *nadaba* 'be noble, active') 'impel to give willingly.'
214. נָדַד (נָדַד Gen. xxxi. 40; נָדַד *naḏḏa* 'hate;' *naḏḏa* 'burn') 'flee.'
215. נִדָּר (נִדָּר) 'vow.'
216. נָהַם (נָהַם * נָהַם; נָהַם *nahima*) 'roar.'
217. נָהַק (נָהַק Job vi. 5, xxx. 7; נָהַק *nahika*) 'bray, cry out.'
218. נָהַר (נָהַר Job iii. 4) 'shine.'
219. נָדַד (a. נָדַד Is. xvii. 11) 'wander.'
220. נָוָה * (a. נָוָה * נָוָה 'beautiful').
221. נָוַח (נָוַח, *inf.* נָוַח) 'come to rest, rest.'
222. נָוַע (נָוַע Is. vii. 2, *inf.* נָוַע) 'totter, tremble, move hither and thither, wander.'
223. נָוַר (a. נָוַר 'lamp,' originally 'shining').
224. נָזַל (נָזַל) 'flow.'
225. נָחַל (נָחַל, נָחַל) 'possess, inherit.'

¹ Cf. König *Lehrgeb.*, 2, 1, 83. The reading is perhaps corrupt, LXX and Targ. require נָעַד.

² Contracted from נָוָה 'beautiful,' probably *Niphal* participle of נָוַח.

226. נָחַר (נִחְרָה* or נִחְרַה* Jer. viii. 16; نَحَرَ *nahira*; נָחַר: נִחְרָה) 'snort, blow,' Jer. vi. 29.†
227. נָחַת (נִחַת) a. נִחַת, וְנִחַת, a. נִחַת * 2 Kgs. vi. 9; نَسَد (נִחַת) 'descend.'
228. נָטַף (נִטַּף) ; נָטַף נָטַף ; cf. יָטַף (*natba*) 'drip.'
229. נָכַח (a. נָכַח * נָכַח * 'stricken').
230. נָכַח (a. נָכַח * c. נָכַח * 'smitten').
231. נָכַח (a. נָכַח * נָכַח * 'lying straight ahead').
232. נָעַם (נִעַם, נִעַם) ; נָעַם נָעַם (*na'ima*) 'be agreeable.'
233. נָקַב (נִקְּבָה) 'female, perforata,' نَقِبَ *naqiba* 'be lacerated, worn' 'bore, pierce.'
234. נָקַד (a. נָקַד * 'speckled').
235. נָקַם (נִקְּמָה, נָקַם) ; نَقِمَ *naqima* 'take vengeance.'
236. נָשָׁה (נָשָׁה) ; نَسِيَ *nasiya* 'forget.'†
237. נָשַׁךְ (נִשַּׁךְ) ; نَشَاحَ 'bite.'
238. נָשַׁל (נִשַּׁל) ; impr. נָשַׁל 'take off, fall off or out.'
239. נָשַׁם (נִשַּׁם) 'breathe violently,' Is. xlii. 14.†
240. נָשַׁק (נִשַּׁק) ; نَشَقَ 'kiss.'
241. נָתַךְ (נִתַּךְ) 'overflow, be poured out.'
242. נָתַן (imperf. נִתַּן Jud. xvi. 5) 'give.'
243. נָתַר (נִתַּר Job xxxvii. 1) 'leap up [of heart].'
244. נָתַר (נִתַּר) 'turn aside.'
245. נָלַךְ (נִלַּךְ) ; نَلَاكَ 'ascend.'†
246. נָרַח (נִרַּח) Ex. xxvi. 12; سَرَحَ *sariha* 'overhang, spread out freely.'
247. נָרַר (a. נָרַר * 'be refractory, rebellious.'

¹ So König 2. 1, 81 f, 462, the doubling of the third consonant taking the place of the lengthening of the characteristic vowel as in

עָגְלִים, עָגְלִים, קָטְנִים, קָטְנִים.

² An Aramaism, cf. Gesenius-Kautzsch, *Hebr. Gr.* § 19, f and § 66, e.

248. עֲבָדָה (עֲבָד) 'work, service;' عِبْد 'abūda 'be a slave'
'work, serve.'
249. עֵבָה (pf.; عَبِيَ حَص: 0-04: 'abīa) 'be thick, fat.'
250. עֲבִירָה (עֲבִיר; عَبِيَ 'abīra) 'overflow; cross, pass over.'
251. עֲבֹת * (עֲבָת 'thickly woven').
252. עֲבִיבָה * (עֲבִיב; Ez. xxiii. 5, 'ajība) 'عَجِب 'ajība)
'desire, lust for.'
253. עֲגֹל * (a. عَجَل 'round;' عَجَل 'ajila 'hasten').
254. עֲרֹנָה * (עֲרֹנָה 'voluptuous pleasure,' Gen. xviii. 12).
255. עֹר (a. عَر 'witness') kt. 'cite as an example,' Lam. ii.
13.†
256. עֹז (inf. עֹז Is. xxx. 2.) 'seek refuge.'†
257. עֲוֹלָה * (עֲוֹלָה 'unrighteousness').
258. עֹר (a. عَار: عَجَار 'ajāru 'be jealous') 'awake.'
259. עֹז (a. عَزَز: عَزَز 'azizta) 'be strong.'
260. עֹזֶר (עֹזֶר) 'help.'
261. עִיט (יִעַט) 1 Sam. xxv. 14) 'rush upon.'
262. עֵיף (יִעַף, a. יִעַף) 'be exhausted.'
263. עֵלָה (pf., impf., a. عَلَا 'leaves,' originally 'growing
up;' عَلَا 'alīa 'be or become high, ascend') 'ascend,
go up.'
264. עֵלָז (a. عَزَّ Is. v. 14) 'rejoice.'
265. עֵלֶט * (עֵלֶט 'thick darkness;' غُلظ jalūza 'be thick,
dense').

¹ עֲבָדָה probably bears the same relation to adjectives of the form *qatūl* as abstract nouns like מְלָאָה do to adjectives of the form *qatīl*, cf. p. 152. The only other abstract of this form is סְחָרָה * Ez. xxvii, 15, which is probably corrupt: cf. Prof. Toy's critical notes on the Hebrew text of Ezekiel, in *The Sacred Books of the Old Testament* ed. Prof. Haupt, p. 83, l. 22.

² The verbal forms are doubtful; the perfect עֵיפָה may be read as the adjective עֵיפָה, the imperfect יִעַף, יִעַף from יִעַף.

266. עִמַּל (*a.* עִמַּל, עִמַּל; نَحْمَلُ *amila*) 'fatigue, exert oneself, labor.'
267. עִמַּק (*a.* עִמַּק, עִמַּק; اعمق *amūqa*; اعمق *āḥḥūq*; اعمق *āḥḥūq*) 'be deep,' Ps. xcii. 6.†
268. עִנַּג (*a.* עִנַּג, 'effeminate; غنج *ḡanija* 'be coy, coquettish').
269. עִנַּה (*pf., impf.,* עִנַּה; عني *aniya*) 'be pressed down, suffer.'
270. עִנַּף* (*a.* עִנַּף, 'full of branches,' Ezek. xix. 10).
271. עִצַּל (*a.* עִצַּל, 'lazy,' عِظَل *ʿiṣal*; عِظَل *ʿiṣal*; عِظَل *ʿiṣal*) 'stick together'.
272. עִצַּמַּה (*a.* עִצַּמַּה, Ps. xxxviii. 20, عِظَم *ʿiṣuma*) 'be strong, mighty.'
273. עִקַּב (*a.* עִקַּב, 'deceive.'
274. עִקַּר (*a.* עִקַּר, 'banded, striped') 'bind,' Gen. xxii. 9.†
275. עִרַּב (*a.* עִרַּב, 'be sweet.'
276. עִרַּה* (*a.* עִרַּה, 'bare places,' originally 'bare, naked,' Is. xix. 7, عِرِيَا, عِرِيَا; عِرِيَا *ʿiriya*).
277. עִרַּל (*a.* עִרַּל, 'uncircumcised; غرل *ḡarila*) 'circumcise,' Lev. xix. 23.†
278. עִרַּם* (*a.* עִרַּם, 'naked').⁴
279. עִרַּמַּה* (*a.* עִרַּמַּה, 'heap').
280. עִרַּמַּה (*a.* עִרַּמַּה, عرما *aruma*) 'be sly, crafty.'
281. עִשַּׁן (*a.* עִשַּׁן, 'smoke.'

¹ Cf. construct plural יִרְאִי of יִרָא 'fearing.'

² Denominative from עִנַּף 'branch.'

³ Denominative from עִרַּל 'foreskin.'

⁴ Secondary stem made on the basis of עִרַּם 'naked' from עִרַּר.

282. עֲשֹׂק (*a.* עֲשֹׂק Jer. xxii. 3, עֲשֹׂקָה Is. xxxviii. 14) 'oppress.'
283. עֲשָׂר (עֲשָׂרָה Job xv. 29; cf. عَثَل *'athila* 'be much') 'be rich.'
284. עֲשֵׂשׁ (*a.* עֲשֵׂשׁ Ps. xxxi. 11) 'be grieved, waste away.'
285. עֲשֵׂה (*a.* עֲשֵׂה Ezek. xxvii. 19) 'be smooth,' Jer. v. 28.†
286. עָתָק; עָתָק; עָתָק; עָתָק (*a.* עָתָק, עָתָק) 'advance, become old.'
287. עֲתָר (עֲתָרָה) 'pray.'
288. פָּגַשׁ (פָּגַשָׁה or פָּגַשׁ Gen. xxxii. 18) 'meet.'
289. פָּדָה (*pf.*, *imperf.*; فَدَا: *f'ada:* [impr.]) 'redeem.'
290. פוֹשׁ (פּוֹשֶׁשָׁה Mal. iii. 20) 'spring, skip.'
291. פָּחַד (פָּחַדָה, פָּחַדָה* Jer. ii. 19) 'tremble, fear.'
292. פָּטַר (פָּטַרָה 1 Sam. xix. 10) 'get away, escape.'†
293. פָּלַט (פָּלַטָה, פָּלַטָה* and פָּלַטָה* Ezek. vii. 16.†) 'escape,' Ezek. vii. 16.†
294. פָּנָה (*pf.*, *imperf.*; فَانَى *faniya* 'vanish') 'turn, depart.'
295. פָּסָה (פָּסָה Ps. xii. 2) 'cease, vanish.'†
296. פָּצַר (פָּצַרָה) 'urge.'
297. פָּרָה (*pf.*, *imperf.*; فَارَى *fariya*) 'be fruitful, bloom.'
298. פָּשַׁט (פָּשַׁטָה 1 Sam. xix. 24; J. פָּשַׁט) 'take off (clothes), plunder.'
299. פָּתָה (*imperf.*; فَתَى *fatiya*) 'be open, simple, inexperienced.'
300. צָבָה (*a.* צָבָה Num. v. 21) 'swell up,' Num. v. 27.†

¹ Professor Haupt compares this word with Assyrian *ašāšu* 'be grieved,' cf. Delitzsch HW. 151.

² Cf. Gesenius-Kautzsch, *Hebr. Gr.* §44, d. König, *Lehrgeb.* 2, 1, 510, and Stade, *Lehrb.* §77, b, regard the *i* as a phonetic modification of *a*.

³ Cf. Barth, *Nominalb.* §112. The *scriptio plena* is perhaps due to the influence of the synonymous פָּלַט. Olshausen, *Lehrb.* §180, and Lagarde, *Übers.*, 85, regard the form as a diminutive like the Arabic *qutail*.

301. צדק (יִצְדֵּק) ; צִדְקָה ; J. L. T. צִדִּיק ; $\alpha\epsilon\phi$: *ṣadqa* 'be proper, right, righteous.'
302. צהב* (*a.* צָהָב 'gold-colored'; صَهَب *ṣahiba* 'be blackish-red').
303. צוח (יִצְחֹק) Is. xlii. 11, צִחוּחַ 'cry for joy.'†
304. צור (וַיִּצֹר) 'press together, close up.'
305. צור (וַיִּצֹר) Deut. ii. 9) 'attack, distress.'
306. צור (וַיִּצֹר) 'form.'
307. צחח (צָחַח) Lam. iv. 7, *a.* צָח 'be white, bright, clear.'†
308. צחנתו* (צָחַנְתָּה) 'stench,' Jo. ii. 20).
309. צחק (יִצְחַק) ; צָחַק : צָחַק : צָחַק (*ṣahika*)¹ 'laugh.'
310. צחר* (*a.* צָחֲרוֹת 'white,' Jud. v. 10).
311. צלח (יִצְלַח, יִצְלַח, יִצְלַח ; صَاحَ *ṣahūḥa*) 'be successful, succeed, come upon.'
312. צלל (וַיִּצְלַלְהָ) 2 Kgs. xxi. 12, Jer. xix. 3) 'tingle.'
313. צמא (יִצְמֹא, יִצְמֹא, *a.* צָמָא, צָמָא ; ظَمِيَ *ẓami'a*) 'be thirsty.'
314. צנף (יִצְנֹף) 'skein,' Is. xxii. 18) 'wind.'
315. צער (יִצְעַר, יִצְעַר ; صَعِدَ *ṣa'idu*) 'grow up, advance, stride.'
316. צען (יִצְעֹן) Is. xxxiii. 20 ; \leftarrow טָעַן 'carry, bear, suffer') 'be carried away' [?].†
317. צעק (יִצְעֹק, *impr.* יִצְעֹק) Jer. xxii. 20, صَعَق *ṣa'iqā*) 'cry out.'
318. צער (יִצְעַר) Jer. xxx. 19, *a.* צָעֹר *kt.* Jer. xiv. 3, xlviii. 4; J. L. T. צָעִיר ; صَغِيَ *ṣaḡira, ṣaḡura*) 'be small, mean.'
319. צר (יִצֹר, יִצֹר, *inf.* צָר, *a.* צָר) 'be pressed together, narrow.'

¹ Cf. Wright, *Comp. Gram.*, p. 63.

337. קרר* (a. קר 'cold;' قَرَرْتُ *qarirta*, 'be cold;' قَلَّ: *qayarra*).
338. קשב (תִּקְשְׁבֶנָּה) Is. xxxii. 3) 'be sharp [of ears].'[†]
339. קשה (*impf.*, a. קָשָׁה) 'be hard, severe.'
340. ראה (*pf.*, *impf.*, *inf.* רָאָה Ezek. xxviii. 17, a. רִאָּה*
c. רָאָה Job x. 15; رَأَى: *rē'ā*) 'see.'
341. רבב (רָבַב, a. רָב, רִבְבָה) 'be or become much.'
342. רבב (*pf.* רָבַו Gen. xlix. 23) 'shoot' [?].[†]
343. רבה (*pf.*, *impf.*; رָبَى; *rabī'a*) 'increase, become great.'
344. רבע (*inf.* רִבְעָה Lev. xx. 16) 'lie with.'
345. רבץ (רָבִיצַ; J. רָבִיעַ) 'crouch down, lurk.'
346. רגז (רָגַז, *impf.* רִגְזָה) 'be excited, aroused.'
347. רגע* (a. רָגַעַי 'peaceful, quiet,' Ps. xxxv. 20).
348. רגש (רָגַשׁ, Ps. lxiv. 3; رָגַشَ *ragīša*) 'be aroused, in restless motion,' Ps. ii. 1.[†]
349. רדר (*inf.* רָדַר Is. xlv. 1) *pt.* 'tread down, subdue.'
350. רהב (*impf.* רָהַב Pr. vi. 3; J. L. T. رَهَب; *rahība* 'fear') 'be proud, violent to; urge.'
351. רוה (*impf.*, a. רוּהָ, רוּהָ; رَوَى; *rayī'a*; رَوَى: *rayī'a*) 'drink to satiety, be satisfied with drink.'
352. רוח (רוּחַ Job xxxii. 20, רִחוּחַ; رَوِحَ; *rayīḥa*) 'become wide, pleasant.'
353. רום (*inf.* רוּם* Ezek. x. 17; *Bib. Ar.* رَم) 'be or become high.'
354. רוה (רוּהָ* רוּהָ 'lean,' رَوَى; *radhi'a* 'become lean') 'make vanish' [?], Zeph. ii. 11.[†]
355. רזן (a. רָזַן 'prince,' Pr. xiv. 28; رَزَن; *razana* 'be heavy')
pt. 'prince.'

¹ Cf. p. 169, ft. nt. 1.

² Perhaps corrupt, cf. Perles, *Analecten*, p. 61.

356. רַחֵם (אַרְחֶמֶךָ) Ps. xviii. 2; רַחֵם יִסֵּחַ; رَحِمَ, *raḥima*, رحِمَ *raḥima*; cf. מֵחַלֵּל: *mēhla*) 'love.'[†]
357. רָחַץ (יִרְחֹץ, יִרְחֹץ, *inf.* רָחַץ) 'wash.'
358. רָחַק (יִרְחֹק, *inf.* רָחַק, *a.* רָחַק) Ps. lxxiii. 27, *a.* רָחַק; רָחַק: רָחַק (*a.* רָחַק) 'be or become distant.'
359. רָטַב (יִרְטֹב) Job xxiv. 8, *a.* רָטַב Job viii. 16; רָטַב יִטֵּב; رَطَبَ, *raṭiba*, رَطَبَ: رَطَبَ (*a.* رَطَبَ) 'be wet, moist.'[†]
360. רִיק (א. רִיק 'empty, vain').
361. רָכַב (יִרְכֹּב, יִרְכֹּב, *inf.* רָכַב, *a.* רָכַב) רָכַב; رَكَبَ, *rakiba*; رَكَبَ: رَكَبَ (*a.* رَكَبَ) 'ride.'
362. רָךְ (יִרְכֹּךְ, *inf.* רָךְ, *a.* רָךְ) رَکَّ, *irakku* 'be thin, fine, weak.'
363. רָם (יִרְמֹ, *inf.* רָם) Job xxiv. 24) 'rise up, become high.'[†]
364. רָנָה (יִרְנֹה, *inf.* רָנָה) 'cry out aloud, rejoice.'
365. רָעַב (יִרְעֹב, *inf.* רָעַב, *a.* רָעַב) رَاغِبَ, *ragiba*, رَاغِبَ: رَاغِبَ (*a.* رَاغِبَ) 'be hungry.'
366. רָעַד (יִרְעֹד, *inf.* רָעַד, *a.* רָעַד) رَعَدَ, *re'da* 'tremble.'[†]
367. רָעָה (יִרְעֹה, *inf.* רָעָה, *a.* רָעָה) رَعَى, *re'ia* 'tend, pasture.'
368. רָעַם (יִרְעֹם, *inf.* רָעַם, *a.* רָעַם) رَعَى, *re'ma* 'roar.'
369. רָעָה (יִרְעֹה, *inf.* רָעָה, *a.* רָעָה) رَعَى, *re'ia* 'be bad, evil.'
370. רָעַשׁ (יִרְעֹשׁ, *inf.* רָעַשׁ, *a.* רָעַשׁ) رَعِشَ, *ra'isa*, رَعِشَ: رَعِشَ (*a.* رَعِشَ) 'be shaken, tremble.'
371. רָפַד (יִרְפֹּד, *inf.* רָפַד, *a.* רָפַד) رَفَدَ, *rafada* 'be spread out.'[†]
372. רָפָה (יִרְפֹּה, *inf.* רָפָה, *a.* רָפָה) رَفَا, *rafaha* 'sink down, be limp.'
373. רָצָה (יִרְצֶה, *inf.* רָצָה, *a.* רָצָה) رَضِيَ, *raḍiya* 'be pleased, like.'
374. רָקַב (יִרְקֹב, *inf.* רָקַב, *a.* רָקַב) رَكَبَ, *rakaba* 'rot.'

[†] Cf. Lane, *Lexicon*, Part III, p. 1141a.

² The *daghesh* may be *affectuosum*, and the form, therefore, an *u* perfect from רָוַם (353). So Stade, *Lehrb.* §§ 413, e; 138, b.

³ Usually translated 'spread out' *tr.* The meaning 'be spread out' suits the context just as well, and agrees better with the intransitive form.

394. שֹׁאֵר (שְׂאִירִית) 'remainder, remnant;' سَرى *sa'ira* 'remain over,' 1 Sam. xvi. 11.†
395. שְׁבָה (*pf.*, *impr.*, שְׁבִיָּה 'captivity') 'carry into captivity.'
396. שָׁבַת (תְּשַׁבֵּת) Lev. xxvi. 34) 'stop, rest.'
397. שָׁגָה (שְׁגָה) 'go astray, err.'
398. שָׁלַח (יִשְׁלַח) Deut. xxviii. 30) 'lie with.'†
399. שָׂרַף (שְׂרָפָה) 'burning,' 2 Kgs. xix. 26) *pt. p.*, 'burnt.'
400. שָׁב (*inf.* שָׁב Josh. ii. 16) 'turn.'
401. שָׁוָה (*imprf.*, *a.* שְׁוָה* שָׁוָה² 'plain,' originally 'level,' Gen. xiv. 5; سَوَّى *sawīia*) 'be like, equal.'
402. שָׁעָה* (שְׁוָעָה) *c.* and *s.* 'cry for help'.
403. שָׁחָה (שָׁח, *a.* שָׁח)³ 'bend down, be bent down, depressed.'
404. שָׁחַט (שָׁחַטָה) Hos. v. 2) 'slaughter.'
405. שָׁחַר (*a.* שָׁחַר) 'become black,' Job xxx. 30.†
406. שָׁחַר (וַתִּשָּׂר) Jud. v. 1) 'sing.'
407. שָׁכַב (שָׁכַב, *inf.* שָׁכַב, שָׁכַבָּה* שָׁכַבְתָּ 'pouring out;' שָׁכַב מֵחַ; سَكَبَ : *sakba*) 'lie, recline.'
408. שָׁחַח (שָׁחַחָה and *s.*, שָׁחַח, *a.* שָׁחַח* שָׁחַחִים) 'forget.'
409. שָׁכַךְ (*inf.* שָׁךְ Jer. v. 26) 'sink, go down, bend down.'
410. שָׁכַל (תִּשְׁכַּל, תִּשְׁכַּל; L. T. תְּכִיל, תְּכִילָה *thakila*) 'become childless.'
411. שָׁכַן (שָׁכַן, *a.* שָׁכַן; שָׁכַן) 'dwell, inhabit.'
412. שָׁכַר (שָׁכַר, *inf.* שָׁכַר Hag. i. 6; سَكِرَ *sakira*; سَكِرَ : *sakra*) 'become drunk.'

¹ Probably a secondary nominal derivative from an adjective שְׂאִיר*.

² The form שְׁוָה is hardly correct, being a combination of the absolute and construct forms; the proper reading is probably the construct שְׁוָה (so Haupt).

³ The imperfect שָׁחַח is best considered as belonging to the *Niphal*.

413. *שָׁלַח*, *א. שָׁלוּ*, *שָׁלַח*, *שָׁלַח*; *سلى salia* 'be tranquil, safe.'
414. *שָׁלַח* *Eccl. ii. 19*; *שָׁלַח* *Eccl. ii. 19*; *سَلَط salata*, *saluta* 'be firm, sharp, prevail') 'rule over.'
415. *שָׁלַח* (*שָׁלַח*, 'plunder') 'plunder.'
416. *שָׁלַח*, *שָׁלַח*, *שָׁלַח*, *א. שָׁלַח*; *سَلِم salima* 'be complete, unharmed.'
417. *שָׁמַח*, *שָׁמַח*, *א. שָׁמַח*, *שָׁמַח* 'be amazed, desolate.'
418. *שָׁמַח* (*שָׁמַח*) *Deut. xxxii. 15*, *א. שָׁמַח*, *שָׁמַח* ¹*Gen. xxvii. 28, 39*; *שָׁמַח* *سَمِن samina* 'be fat.'
419. *שָׁמַח* (*שָׁמַח*, *שָׁמַח*, *שָׁמַח*, *inf. שָׁמַח*) *Is. xxx. 19*; *שָׁמַח* *سَمِع sami'a* 'hear.'
420. *שָׁמַח* (*שָׁמַח*, 'whispering,' *Ex. xxxii. 25*; cf. *شَمِص sam-isa* 'speak quickly and indistinctly').
421. *שָׁמַח* (*שָׁמַח*, *Ps. cxli. 3*) 'watch, keep, protect.'
422. *שָׁמַח* (*שָׁמַח*, 'stamping [of horses],', *Jer. xlvii. 3*).
423. *שָׁפַל*, *שָׁפַל*, *שָׁפַל*, *inf. שָׁפַל*, *שָׁפַל*, *שָׁפַל*; *سَفَلَ safila, safula* 'be or become low.'
424. *שָׁפַל* (*שָׁפַל*, 'abundance').
425. *שָׁפַל* (*שָׁפַל*, *Job xxvi. 13*) 'be beautiful, please,' *Ps. xvi. 6*).
426. *שָׁקַד* (*א. שָׁקַד*, 'almond tree,' originally 'waking,' *T. שָׁקַד* 'be awake, watch.'
427. *שָׁקַד* (*שָׁקַד*, *L. T. שָׁקַד*) 'hiss, whistle.'
428. *שָׁתָה* (*pf., impf. שָׁתָה*; *سَاتَى sati'a*) 'drink.'

¹ Cf. *קָטַן*, *קָטַן* 'small.'

429. שִׁתּוֹ (שִׁתּוֹ) Ps. xlix. 15, lxxiii. 9) 'set; be placed.'†
 430. תִּאֲבָה (תִּאֲבָה) Ps. cxix. 20; L. T. תִּאֲבָה 'desire.'
 431. תָּמַם (תָּמַם, *impf.* תָּמַם and תָּמַם, *a.* תָּמַם) 'be complete, perfect.'
 432. תִּפְלָה (תִּפְלָה, *insipid*, תִּפְלָה; تَفِلَّ *tafila* 'become ill-smelling').
 **433. רָאָה (רָאָה, *inf.* רָאָה) 'languish.'

2. THE MEANING OF THE INTRANSITIVE VERB.

The great majority of the intransitive verbs in Hebrew denote a physical or mental condition, e. g. יָבֵשׁ 'be dry,' שָׁפַל 'be low,' יָרָא 'fear,' אָהַב 'love'; a passage into such a condition, e. g. גָּדַל 'increase, become great,' צָלַח 'succeed'; or a change of condition, e. g. אָבַד 'perish,' יָקָץ 'wake.' All of these come under the general category of verbs of *being* and *becoming*, for which the term 'stative' may be employed. Such verbs are Nos. 1, 2, 3, 5, 6, 7, 14, 17, 21, 22, 23, 25, 26, 30, 33, 36, 38, 41, 45, 46, 47, 48, 50, 58, 60, 61, 62, 65, 66, 67, 68, 69, 70, 71, 72, 73, 78, 79, 80, 82, 83, 84, 85, 87, 88, 89, 92, 93, 94, 95, 96, 97, 99, 100, 101, 102, 103, 104, 105, 106, 108, 110, 111, 113, 115, 116, 119, 120, 121, 122, 124, 125, 126, 127, 128, 130, 131, 132, 134, 137, 138, 139, 141, 142, 144, 145, 149, 150, 155, 156, 158, 159, 160, 162, 167, 168, 170, 171, 172, 175, 176, 177, 180, 181, 184, 185, 192, 193, 196, 198, 200, 204, 206, 207, 209, 210, 211, 218, 221, 222, 232, 236, 247, 249, 252, 258, 259, 262, 264, 267, 269, 272, 275, 280, 281, 283, 284, 285, 286, 291, 295, 297, 299, 300, 301, 307, 311, 312, 313, 315, 316(?), 318, 319, 321, 322, 324, 325, 326, 331, 336, 338, 339, 341, 343, 346, 348, 350, 351, 352, 353, 356, 358, 359, 362, 363, 365, 366, 369, 370, 371, 372, 373, 374, 377, 378, 379, 385, 386, 387, 392, 394, 396, 401, 403, 405, 408, 410, 411, 412, 413, 416, 417, 418, 423, 425, 426, 429, 430, 431, 433.

† A modification of שִׁתּוֹ from שִׁית 'put,' after the analogy of verbs mediæ geminatae. Similar forms are בָּזַ from בָּזַ 'despise,' טָח from טָח 'daub.'

Those stems from which only derivatives are made, no form of the *Qal* occurring (marked * in the list), and the following, occurring only as participle or infinitive, viz.: Nos. 13, 27, 42, 109, 174, 199, 355, 375, 399, do not give direct evidence as to the meaning of the verb, although meanings similar to those discussed above are indicated by the derivatives.

Of those verbs which have not distinctly stative meaning many are to be regarded as belonging to the transitive type.

1) In a number of stems, verbs with transitive form and active meaning have intransitive derivatives. In the majority of cases these derivatives point more or less surely towards the existence of a verb of intransitive form and stative meaning alongside of the transitive active verb, just as in the case of קָצַר 'cut off,'

קָצַרְתָּ 'be cut off, be short;' e. g. נִקְבָּה 'perforata, female' indicates the possibility of the former existence of a verb נִקְבָּה* 'be pierced, perforated': such are Nos. 19, 43 (cf. p. 180) 51, 52 (cf. p. 180) 55, 77, 91, 178, 197 (*a* impf. due to the guttural), 202, 213, 233, 248, 255, 274, 277, 314, 335, 354, 384, 388, 415.

In a few cases the apparently intransitive derivatives belong to the active verbs. In No. 404 the form קָטְלָה, in Nos. 129, 260, 395, the form קָטְלָה, and in Nos. 203, 205, 357, 421, the form קָטְלָה, is used to make abstract nouns of action: the use of these forms, which are regularly confined to intransitive verbs, has been extended in these few cases to the transitive verb. In No. 31 the adjective or participle בָּחוּן is best considered a form *gatal*, which is not a special intransitive form in Hebrew. In No. 239 נִשְׁמָה 'breath' is perhaps simply a concrete noun. Those verbs which have *a* imperfects owe these forms to the influence of the gutturals.

2) In the verbs *mediæ infirmæ* Nos. 81, 244, 304, 305, 306, 380, 381, 406, the *a* of the shortened imperfect is due to the guttural ך which is in all cases the final stem-consonant.¹ The intransi-

¹ It is to be noted that in all these cases the first stem-consonant is a sibilant. The only other verbs *mediæ infirmæ* with final ך, which make shortened *imperfects*, viz.: גָּוַר 'sojourn,' גָּוַר 'fear,' have the transitive form גָּוַרְתָּ.

tive forms of Nos. 9, 15, 43, 52, 57, 123, 154, 215, 349, and (287) עתר 'pray' (cf. عתר 'atara 'sacrifice') are probably to be explained in the same way.

3) In the verbs ל"ה Nos. 24, 179, 289 the only evidence as to the originality of the intransitive forms is furnished by the subjunctive of the cognate verbs in Ethiopic. These intransitive subjunctive forms are rare, in every case the transitive form being more common, and are probably due simply to the fact that in Ethiopic the transitive verbs have a tendency to assume the intransitive form in the subjunctive.¹

4) The feminine imperatives of Nos. 53 and 63, viz. : גחי 'drive forth,' Mic. iv. 10, דושי 'tread,' Mic. iv. 13, both occur after an imperative of the active form, viz. : קומי דושי; חולי גחי; the apparent intransitive forms are no doubt due to dissimilation, standing for גוחי, דושי: cf. forms like נקומות for נקומות²

5) The following also belong to the transitive type, viz. : 11. אכל 'eat,' originally of transitive form in the imperfect, as is shown by נאכל נאכל, יאכל *ia'kulu*, Ass. *ekul*; the *a* of the imperfect is probably due to dissimilation, *io'kul*, < **io'kol*; cf. נאזל 'go' *nēzal* < **nēzēl*, the original characteristic vowel of the imperfect being *ē* < *i* as is shown by the imperative זל.³

54. גל 'roll;' the only intransitive form *impr.* גל is perhaps a shortened imperative *Piel* from גלל.⁴

¹ Some transitive verbs like *qabara* 'bury,' *qatala* 'kill,' make in rare instances an *a* subjunctive, and in the modern dialects Amharic, Tigre, and Tigrifia all subjunctives have the *a* form. Cf. Prætorius, *Die Amharische Sprache*, Halle, 1879, p. 217; *Gram. d. Tigrifia Spr.*, Halle, 1871, p. 276; E. Littmann, *Das Verbum d. Tigre Spr.* ZA. xiv, p. 15.

² Cf. Stade, *Lehrb.*, § 599, b.

³ The characteristic *ē* of the imperfects of verbs יאכל, e. g. יאכל, 'seize,' etc., seems to be due also to dissimilation, cf. יאחו but יאחו.

⁴ Cf. Stade, *op. cit.* § 592, d.

140. יָרָה 'throw [lots];' this verb is a by-form of transitive יָרָה, יָרוּ being modified from יָרוּ just as שָׁתוּ from שָׁתוּ; cf. (429).

242. נָתַן 'give;' the only intransitive form is נָתַן in the collocation נָתַן-לָךְ 'we will give thee;' the characteristic *a* is a phonetic modification of the more original *i* due possibly to the following *a* vowel.

261. עִיט 'rush upon;' the *a* of the imperfect is due to the influence of the guttural ע.

400. שָׁב 'return;' the single apparently intransitive form *inf.* שָׁב is probably incorrectly pointed, perhaps on account of the defective writing.¹

The remaining verbs are more or less readily referable to a stative basis,² viz.:

1) Verbs indicating perceptions of the senses, the idea of these verbs being, not the active exercise of the perception, but the condition of the subject while exercising it, viz.: (135) טָעַם 'taste' *tr.*, (340) רָאָה 'see,' (419) שָׁמַע 'hear;' (328) קָסַם 'divine' is probably also to be classed here.

2) Verbs of flowing, overflowing, and dripping, since they indicate conditions rather than actions, viz.: (153) יָצַק 'flow [of blood],' (224) נָזַל 'flow,' (228) נָטַף 'drip,' (241) נָתַךְ 'overflow, be poured out,' (250) עָבַר 'overflow.'

3) Verbs of motion which indicate a change of state like אָבַד 'perish,' אָפַם 'be no more,' viz.: (40) בָּרַח 'flee,' (75) הָלַךְ 'go, depart, vanish,' (76) הָפַךְ 'turn, overturn, flee,' (292) פָּטַר 'get away, escape,' (294) פָּנָה 'turn,' (397) שָׁנָה 'go astray;' in these verbs the emphasis was originally on the idea of change of condition; הָלַךְ, however, has come to be in its ordinary use simply a verb of motion 'go'; in the stem הָפַךְ there may have been originally two verbs, e. g. הָפַךְ 'overturn, destroy,' and הָפַךְ* 'be overturned, destroyed' as in the stem קָצַר.

¹ Cf. Stade, *Lehrb.* § 619 f.

² Cf. Steinthal-Misteli, *Charakteristik d. hauptsächlichsten Typen d. Sprachb.*, p. 458.

4) Verbs of *approaching* and *meeting*, the original idea being 'to be or become near, come in contact with,' viz.: Nos. 212, 288, 332, 333, 334.

5) Verbs meaning 'to be in or to assume a certain position,' the stative idea being more original, viz.: (41) כָּרַךְ 'kneel,' (49) נָהַר 'bend down,' (344) רָבַע 'lie with,' (345) רָבַץ 'lie down, crouch,' (361) רָכַב 'ride, mount,' (407) שָׁכַב 'lie, recline,' (409) שָׁכַךְ 'sink, go down, bend down.'

6) Verbs denoting various kinds of cries and modes of speech, which may be spoken of as verbs of *utterance*, e. g. זָעַק 'cry out,' צָחַק 'laugh': these are to be considered similar to verbs which denote an emotional state, such as יָרָא 'fear,' שָׂמַח 'rejoice,' since an emotion and its expression are closely connected in the minds of a primitive people; they are Nos. 18, 56, 86, 188, 208, 216, 217, 226, 303, 309, 317, 364, 368, 382, 391, 427. Here also is probably to be classed (187) לָעַג 'mock,' cf. Syriac.

7) Verbs which indicate various actions of the lips, mouth, and throat, such as sucking, licking, swallowing, etc.: these verbs must have referred originally to the specific quality of the action, rather than to the action as such; they are (34) בָּלַע 'swallow,' (148) נָקַח 'suck,' (189) לָעַץ 'sip' (if it is not rather לָוַע), (237) נָשַׁךְ 'bite.' Here are also probably to be classed (428) שָׁתָה 'drink,' and (240) נָשַׁק 'kiss.'

8) The following verbs, which are best considered individually, viz.:

12. אָלַף 'learn,' originally 'be or become accustomed to,' cf. Arabic.

29. בָּוָא 'enter, come,' to be connected with the preposition בְּ 'in,' originally perhaps 'be or become inside' then to 'enter, come.'

32. בָּטַח 'trust,' indicates a condition of the mind like אָהַב 'love.'

35. בָּעַל 'rule over, possess,' denominative from בָּעַל 'lord,' meaning originally 'be lord, ruler.'

74. הָדָר 'honor, take the part of,' to be regarded like (32).

90. חָבַשׁ 'bind,' the single intransitive form indicates a characteristic of the deity, הוּא יְכַאֵיב וַיַּחְבֵּשׁ 'he wounds and binds up,' and to this fact its intransitive form may be due.

98. חטא 'sin,' originally 'be without, miss' like חָטָא: *ḥat'a*.

107. חמס 'act violently to, hurt,' originally 'be violent,' cf. Arabic.

118. חצב 'hew;' the original idea of the verb was probably that of continuous action which is analogous to state; the idea of simple action, however, has prevailed, the forms of the verb being regularly transitive.

133. טחן 'grind,' probably to be regarded as the preceding verb.

136. טרף 'tear, rend;' the single intransitive form that occurs indicates a quality, viz.: יֹאבִיטְרָף 'a wolf that ravens, a ravening wolf,' and may hence be regarded as stative.

146. ילר 'bear,' referred originally to the condition of the mother: the idea of action, however, seems to have prevailed, nearly all of the forms being transitive.

161. יקש 'lay snares,' denominative from יָקַשׁ 'fowler,' meaning originally 'be a fowler.'

164. ירר 'descend;' the intransitive imperfect forms are used either in the idiom 'descend in tears' used of the eye, Jer. ix. 17, xiii. 17, xiv. 17, Lam. iii. 48, where the verb is practically equivalent to רָמַע 'be full of tears' or מָלֵא 'be full;' or they stand in pause, 2 Sam. xxii. 10, Ps. xviii. 10, Pr. xxx. 4, Job xvii. 16, where the *a* may be regarded as due to the influence of the ר, which was perhaps more strongly guttural in this position. When the verb means simply 'descend,' the forms are regularly transitive.

166. ירש 'inherit,' originally 'be heir.'

182. לבש 'put on,' originally 'be dressed, clothed.'

186. למד 'learn,' originally be or become accustomed to,' cf. (12).

214. נדר 'flee,' perhaps originally 'dislike, hate,' cf. Syriac and قَالَى *qalīa* 'hate, leave.'

219. נוד 'wander,' referred originally to the condition of the subject, cf. (222) נוע 'totter, tremble, move hither and thither, wander.'

225. נחל 'possess, inherit,' refers to a condition of the subject, cf. (166).

227. נחה 'descend,' perhaps to be connected with the verb נוח 'come to rest,' meaning originally 'be or become at rest,' 'settle down,' then 'descend.'

235. נקם 'take vengeance,' originally 'be revengeful.'

238. נשל 'take off, fall off or out;' the original meaning of the intransitive forms was 'be taken off, removed' then 'fall off.'

243. נתר 'leap up [of heart],' may refer to condition, rather than action, or the *a* of the imperfect may be due to the ך.

245. סלק 'ascend;' the single form which occurs is doubtless an Aramaism; the verb may have meant originally 'be or become high,' cf. (263).

246. סרח 'overhang, spread out freely,' perhaps originally 'be abundant, overflow.'

256. עון 'seek refuge;' if the intransitive infinitive is not simply due to assonance with the following word, viz.: לעון במעון פִּרְעֵה 'to seek refuge in the refuge of Pharaoh,' it is to be considered as similar to (32) בטח 'trust;' cf. חסה 'seek refuge, trust.'

263. עלה 'ascend, go up,' originally 'be or become high,' cf. Arabic.

266. עמל 'fatigue, exert oneself, work,' originally 'be fatigued by hard work,' then simply 'work.'

273. עקב 'deceive,' originally 'be crooked, deceitful,' cf. derivatives.

282. עשק 'oppress;' the original meaning was probably 'be strong, violent,' cf. derivatives, (107), and Ass. *ešēqu* 'be strong, mighty.'

290. פיש 'spring, skip;' if the single intransitive form is not due to some phonetic modification, originally 'be lively.'

293. פלט 'escape,' originally 'remain alive,' cf. Ass. *balātū* 'live.'

296. פצר 'urge;' the original meaning may have been 'be hard upon,' the verb being then like (107), (282), or the *a* of the imperfect may be due to the ך.

298. פשט 'take off [clothes];' the single intransitive form is perhaps to be explained similarly to (182), originally 'be undressed, stripped.'

323. קוש 'lay snares;' יקשון is probably to be amended יקשו from (161) יקש.

342. רַבַּב 'shoot,' the single doubtful intransitive form is usually so translated. If the form is correct, the meaning may be different; the verb is used intransitively and therefore may have had a stative meaning; it is perhaps to be connected with רַבַּב 'be great.' On the other hand the text may be corrupt.

367. רָעָה 'tend, pasture,' denotes an occupation, which is similar to a condition.

383. שָׁטַן 'oppose,' originally 'to be an adversary, be opposed to.'

390. שָׁאב 'draw [water],' perhaps originally 'have sufficient water,' like (351) רוּה, cf. Arabic.

393. שָׁאל 'ask,' perhaps originally 'desire;' at least it is to be classed with verbs of 'desiring.'

398. שָׁגַל 'lie with;' the vocalization of the single intransitive form is that of the *Qere* שָׁכַב; it is possible, however, that the verb has originally stative meaning like שָׁכַב 'lie, be in a reclining position,' then 'lie with.'

414. שָׁלַט 'rule over,' originally indicated a condition, cf. Arabic.

In these verbs with more or less active meanings, which are to be referred to a stative basis, it is to be noticed that in a large number of cases the verb has prevailingly transitive form, intransitive forms being comparatively few. The general tendency for verbs of the intransitive type to pass over to the active (cf. p. 196) has here been aided by the meaning. Theoretically the majority of these verbs may be regarded as denoting either a condition or an action, and their intransitive forms may be explained as due to the fact that they, like those verbs which have undoubtedly stative meaning, were originally looked upon as denoting conditions by the primitive Semites.

Verbs which have transitive form regularly denote action of some sort, e. g. בָּרָא 'create,' הָרַג 'kill,' דָּקַר 'pierce,' פָּרַת 'cut,' פָּעַל 'do, make,' יָצָא 'go out,' כָּרַע 'kneel down,' רָמַשׁ 'creep,' etc., but there are a number of verbs with transitive form, or at least with no decisive intransitive form, that have meanings similar to those of the intransitive verbs. Excluding verbs ל"ה, which have only one type of inflection, and verbs mediæ infirmæ, almost all of which have transitive form without regard to meaning, these verbs are the following (*impf.* = imper-

fect in *a*; other abbreviations, etc., as in the previous list; the numbering is consecutive to that of this list), viz.:

434. **אחר** *impf.* 'remain behind.'
 435. **בחל** 'be disgusted.'
 436. **בחר** *impf.* 'choose' (**بحر** *baḥara* 'split').
 437. **קטל** 'rest, be still' (**بطل** *baṭila*; **עמא**: *ēḥṭal*).
 438. **בלל** (**בלות**) 'I am anointed,' Ps. xcii. 11; probably to be read **בלותני** 'anoint.'
 439. **ברר** 'hail.'
 440. **ברק** 'lighten' (J. L. **בריק** 'shine').
 441. **גוע** *impf.* 'depart, die.'
 442. **גלש** 'stream forth.'
 443. **גמל** (*pt.* 'ready, ripe,' Is. xviii. 5) 'complete, make ready.'
 444. **גמר** 'complete, be complete.'
 445. **געל** *impf.* 'abominate.'
 446. **געש** *impf.* 'shake, totter.'
 447. **גרס** 'be crushed.'
 448. **דגר** 'brood, hatch' (J. L. T. **דגר** 'heap up, collect').
 449. **דלף** 'drip' (**דלף**).
 450. **דשא** 'become green.'
 451. **הלל** 'shine.'
 452. **הלל** 'be foolish, godless.'
 453. **זחל** 'fear' (**זחל**).
 454. **זכר** 'remember' (**זכר**; **ذكر** *dhakara*; **Hz**: *zakara*, subj. once **עזכר**: *ēzkar*).
 455. **זמם** 'think, plan' (**זמם** 'hum, sound').
 456. **זנח** *impf.* 'despise, spurn' (**زنى** *zaniḥa* 'stink').
 457. **זעם** *impf.* *a* and *o* 'be angry with, punish, curse' (**זעם** 'reprehend').
 458. **זרח** *impf.* 'rise [of sun].'
 459. **חבל** 'act corruptly' (**حبل** *ḥabila* 'be corrupt, unsound, insane').

¹ Cf. p. 180, ft. nt. 1.

460. חָלַל 'be pierced.'
461. חָלַם 'become mature' (חַלַּם *ḥaluma* 'be healthy, virile').
462. חָלַם 'dream.'
463. חָלַף 'pass by, vanish, change' (J. L. חָלַף 'pass by, be gone').
464. חָמַר 'foam.'
465. חָרַג 'tremble' (חָרַג *ḥarigu* 'be narrow, straitened').
466. חָשַׁב 'consider, reckon, plan' (J. T. חָשַׁב; חָשַׁב *ḥasiba*).
467. חָשַׁק 'be bound to, hang to' (J. L. T. חָשַׁק 'bind').
468. חָפַשׁ 'be fat, dull, unfeeling' (J. L. T. חָפַשׁ 'be foolish'; חָפַשׁ *ḥafisa* 'be careless of one's appearance').
469. יָאֵב 'desire' (יָאֵב *yā'ib*).
470. יָדַע *impf.* 'know.'
471. יָרַט 'be steep, plunge down; surrender.'
472. יָרַע 'despair, tremble' (יָרַע *yari'a* 'keep away from, avoid').
473. יָשַׁב 'sit, dwell' (יָשַׁב *yashab*).
474. כָּחַשׁ 'decrease, become lean.'
475. כָּמַח 'become weak, long for' (כָּמַח *kanīha* 'become gray, weak-sighted').
476. כָּסַף 'long for.'
477. כָּשַׁל 'stumble.'
478. לָהַט *pt.* 'flaming' (לָהַט *lahat* 'kindle').
479. לָחַךְ *inf.* 'lick' (J. T. לָחַךְ; לָחַךְ *lahika*).
480. לָעַן *pt.* 'speaking unintelligibly' (לָעַן *la'an* 'speak indistinctly').
481. לָקַק 'lick, lap' (לָקַק *laqqa impf. u*).
482. מָאָס *impf.* 'spurn, despise' (J. מָאָס 'be sticky, soiled').
483. מָכַךְ 'sink down, be brought low' (מָכַךְ *makak* 'be scattered, despised').
484. מָלַךְ 'rule.'
485. מָעַד *impf.* 'be unsteady, slip, totter.'
486. מָעַל *impf. a and o* 'act faithlessly.'
487. מָצַץ 'suck' (T. מָצַץ; מָצַץ *magiṭa*).
488. מָרַד 'be disobedient, rebellious' (J. מָרַד; מָרַד *marada*).

489. מִשַּׁל 'rule.'
 490. מִשַּׁשׁ 'feel, touch' (مَسِسْتُ *masista*).
 491. מִתֵּן 'find pleasant, suck,' Job xxiv. 20.
 492. נִבַּח *inf.* 'bark.'
 493. נִהַר 'flow.'
 494. נִשָּׂר 'watch, keep, be angry.'
 495. נִכַּל *pt.* 'deceitful' (نَكِلَ).
 496. נִעַר 'growl, roar.'
 497. נָפַל 'fall.'
 498. נִצֵּץ *pt.* 'sparkling.'
 499. נִקַּע 'be alienated, estranged.'
 500. נִשַּׁב 'blow' (نَشَبَ, cf. J. נָתַיב).
 501. נִשַּׁף 'blow.'
 502. נִשַּׁת 'become dry.'
 503. נִשָּׂן *pt.* 'shod' (سَانَّ).
 504. נִשָּׂא 'drink, carouse.'
 505. נִשָּׂן 'attend, be useful, profit.'
 506. נִסַּח *impf.* 'forgive.'
 507. נִסַּד 'shudder.'
 508. נִסַּד 'lament' (L. נִסַּד).
 509. עִבַּשׁ 'dry up' (عَبَسَ *'abisa*).
 510. עִגַּם 'be grieved.'
 511. עִדָּף *pt.* 'overhanging, exceeding' (L. עִדָּף 'be more, preferable').
 512. עִטַּף 'be weak' (cf. غَطِبَ *'atiba* 'be powerless, die').
 513. עִלַּם }
 514. עִלָּן } 'rejoice' (cf. a. עִלָּן).
 515. עִמַּד 'stand.'
 516. עִרַב 'become evening' (عَرَبَ; غَرِبَ *gariba*; عَرَبَ :
 '*arba*).
 517. עִרַג 'long, cry for' (عَرَا : '*arga* 'ascend').
 518. עִרַף 'drip' (cf. רִעַף below).
 519. עִרַץ 'terrify, be afraid' (عَرِץ *'arica* 'be or become
 lively').
 520. פִּזַּז 'be dexterous.'
 521. פִּחַז *pt.* 'haughty, wanton' (L. T. פִּחַז 'be frivolous';
 فَخَزَ *fahiza* 'be proud, boast').

522. פסח *pt.* 'limping, halting' (فسح *fasiḥa* 'become corrupt, disordered').
523. פצה *pt.* 'rejoice' (فصح *faṣuḥu* 'be bright, clear').
524. פרח *impf.* 'bloom, be inflamed, break out.'
525. פשע *impf.* 'be rebellious' (cf. فسق *fasiqa* 'turn from right').
526. צהל *impf.* 'neigh.'
527. צלל 'sink down' (ضلت *ḏalilta* 'err, go astray').
528. צלל 'become dark' (ظلت *ḏalilta* 'be in night or day').
529. צמח *impf.* 'sprout forth.'
530. צמק *pt.* 'dry, dried up' (J. צמיק 'shrink').
531. צפר 'contract, stick to.'
532. צרח *pt.* 'crying out.'
533. קדר 'be or become dirty, dark, lament' (قذر *qadhira*, *qadhura* 'be dirty').¹
534. קפא 'be condensed, congealed.'
535. קצף 'be angry' (كاف *kaḏa* 'be afraid, angry, envy, revile').
536. קרן 'be horned, emit rays.'
537. רגן *pt.* 'murmuring.'
538. רגע ('palpitate,' Job vii. 5) 'stir up, terrify.'
539. רדף 'follow, pursue' (T. ردف; ردف *radifa* 'be after, ride behind').
540. רחב 'be wide, open' (J. L. T. رحيب; رحب *raḥiba*, *raḥuba*; רחב: *rēḥba*).
541. רחף 'be weak, wabble' (رخف *raḥifa* 'be soft, thin').
542. רחש 'be excited, bubble up' (رأس *raḥaṣ* 'creep, move').
543. רמם 'become foul, full of worms,' Ex. xvi. 20).
544. רעף 'drip' (رعى *ra'ifa* 'flow').
545. רצץ 'be broken, powerless,' Is. xlii. 4) 'break.'
546. שגב 'be high, raised up.'
547. שכל 'act wisely, have success' (T. נסכל 'recognize, know').
548. שער 'know,' Deut. xxxii. 18 (شعر *ša'ara*).

¹ Cf. ZDMG. 40, 729.

² Cf. Gesenius-Kautzsch, *Hebr. Gr.* § 67, n.

549. שָׁפֵק 'be sufficient' (נִסְפֵּק נִסְפֵּק, J. L. T. סִפִּיק).
 550. שָׁרַד 'escape.'
 551. שָׁרַר 'rule.'
 552. שָׁאף *impf.* 'pant for, thirst for' (cf. سَاجِبَ sajiba 'be hungry').
 553. שָׁדַד 'be violent to, oppress, lay waste.'
 554. שָׁמַף 'stream forth plentifully, overflow.'
 555. שָׁקַט 'rest' (cf. שָׁתַק below).
 556. שָׁקַע *impf.* 'become low, sink down.'
 557. שָׁקַר 'deceive.'
 558. שָׁתַק 'subside, be still' (שָׁתַק שָׁתַק).
 559. שָׁמַה *impf.* 'be astonished, terrified.'
 560. שָׁקַן *inf.* 'be straight' (תָּקַן 'be firm').

The original intransitive form of the following of these verbs is indicated by the cognate languages, viz.: Nos. 437, 449, 453, 455, 459, 461, 463, 465, 466, 468, 469, 472, 475, 478, 479, 480, 483, 487, 488, 490, 495, 500, 503, 508, 509, 511, 516, 517, 519, 521, 522, 523, 527, 528, 530, 533, 535, 539, 540, 541, 542, 544, 547, 549, 558, 560, and perhaps Nos. 512, 525, 552.

In the following no decisive transitive verbal form occurs other than participle or infinitive, which are often made from intransitive verbs (cf. p. 203), so that they may have been originally intransitive, viz.: Nos. 435, 442, 447, 450, 492 (*inf.*), 493, 496, 498 (*pt.*), 499, 501, 504 (*pt., inf.*), 510, 532 (*pt.*) 534 (*pt.*), 537 (*pt.*), 546, 550.

The following are best regarded as having been originally active in meaning, viz.: Nos. 436, 438, 443, 444, 448, 457, 458, 467, 489, 494, 505, 553; Nos. 456, 482, which bear a relation to the intransitive forms in the cognate languages similar to that of קָצַר 'cut off,' to קָצַר 'be cut off'; and (439) בָּרַד 'hail,' (440) בָּרַק 'lighten,' since such verbs are usually regarded in Semitic as actions of the sky, cf. Ar. بَرَقَتِ السَّمَاءُ *baraqat-i 'ssamā'u* 'the sky lightened,' etc.; No. 440, however, may have had intransitive form, cf. Aramaic: also

454. זָכַר 'remember,' perhaps originally 'to penetrate,' cf. זָכַר 'male,' ذَكَرَ *dhakar* 'membrum virile.' On the intransitive Ethiopic subjunctive cf. p. 180, ft. nt. 1.

473. יָשַׁב 'sit,' originally no doubt 'take a seat,' referring to the action; the Syriac verb has transitive form in the imperfect, and the intransitive perfect can hardly be regarded as decisive, since practically all verbs primæ yod in Syriac have the intransitive form.¹

477. כָּשַׁל 'stumble,' originally 'strike against.'

481. לָקַק 'lick, lap;' the action of lapping was probably more prominent than in other verbs of licking and sucking.

497. נָפַל 'fall,' probably regarded simply as an action; وَقَعَ *yaqa'a* 'fall,' has also the transitive form.

515. עָמַד 'stand,' originally denoted action, 'take one's stand.'

A few denominative verbs follow the transitive as being the prevailing verbal type, viz.: Nos. 462, 464, 484, 536, 551.

The verbal forms of (460) חָלַל 'be pierced' are doubtful, the perfect חָלַל Ps. cix. 22, is perhaps to be read as the adjective חָלַץ 'pierced,' or to be considered like the denominatives above. The only form of (545) רָצַץ which has stative meaning is made on the analogy of verbs רָעַץ which have practically all assumed the transitive form with regard to meaning.

The remaining verbs may have had intransitive form originally, their transitive form being due to the general tendency of the intransitive verbs to pass over to the active type (cf. p. 196), though in some cases it is also possible that the original meaning was active, viz.: Nos. 434, 441, 445, 446, 451, 452, 470, 471, 474, 476, 485, 486, 491, 502, 506, 507, 513, 514, 518, 520, 524, 526, 529, 531, 538, 543, 548, 554, 555, 556, 557, 559.

These exceptions to the rule that the verbs of transitive form denote action are therefore only apparent; a large number are shown by the cognate languages to have had originally the intransitive form, while a number are to be regarded as originally denoting action; those verbs about which no conclusive statement can be made are few in number, and are to be explained in one or the other of the above ways.

The fundamental difference, therefore, between the so-called transitive and intransitive verbs, to judge simply from the meaning of the verbs themselves, may very well have been a differ-

¹ Cf. Nöldeke, *Syr. Gram.*, p. 115.

ence between action and state, but it is also theoretically possible to explain the difference, in a large number of instances, as one between volition and non-volition.

Generally speaking, active verbs may be regarded as voluntary, and stative verbs as involuntary, inasmuch as actions are usually the result of an exercise of volition, while states and changes of state are usually independent of the will; verbs of becoming, like גבר 'increase, become great,' and verbs which indicate a change of state, e. g. אבד 'become lost, perish,' are very near to the involuntary idea; emotions (e. g. אהב 'love') and perceptions (e. g. שמע 'hear') are independent of the will; cries and modes of utterance (e. g. יעק 'cry out') are often involuntary; there is an involuntary element in swallowing (בלע), since food which passes a certain point in the throat must go down; sucking (ינק) may be regarded as the half conscious involuntary act of an infant; kissing (נשק) is difficult for the lover to resist, hence involuntary; verbs denoting an action accompanied by exertion (e. g. חצב 'hew,' טחן 'grind') may be looked upon as analogous to involuntary verbs, since people are usually unwilling to perform hard work; learning (למד) is hard work, hence to be regarded as the above; bearing children (ילד) is involuntary; taking vengeance (נקם) was incumbent upon every primitive Semite, hence independent of his will; riding (רכב) might have been looked upon as involuntary 'to be carried' as in Latin *vehor*; and similar explanations may be offered for many other verbs.

It is questionable, however, whether the idea of volition would naturally enter at all into verbs which indicate simply states and conditions, such as, e. g. יטב 'be good,' עצם 'be strong, mighty,' etc. There is, moreover, no intransitive verb, the meaning of which requires necessarily to be explained on an involuntary basis; and it is strange, if the original meaning of the intransitive verbs was involuntary, that such verbs as מצא 'find,' נפל 'fall,' 'present no trace of intransitive form.

It is, of course, possible that a primitive people should distinguish in form between verbs implying volition and those implying non-volition, but it seems much more likely that they should have been impressed by the more commonplace and more apparent distinction between state and action. Besides, if voli-

tion had been the principle of division between the two verbal types, we should expect to find a distinction between voluntary and involuntary actions, and perhaps between voluntary and involuntary states, in the same verbal stem; such as, for example, 'to kill voluntarily' and 'to kill involuntarily, by accident;' 'to strike voluntarily' and 'to strike involuntarily, butt into,' 'to be good voluntarily' and 'to be good perforce,' etc.; but no instances of this kind occur. On the contrary, in those stems where both verbal types are made, the distinction is regularly that of action and state, e. g.:

רָכַח 'crush'	רָכַח 'be crushed, fine,'
יָחַלַּשׁ 'weaken'	יָחַלַּשׁ 'be weak,'
חָרַב <i>impr.</i> 'devastate'	יָחַרַב 'be desolate,'
צָקַן 'pour out'	וַיִּצָק 'be poured out, flow,'
מָלֵא 'fill'	מָלֵא 'be full,'
פָּטַר 'free'	וַיִּפָּטַר 'get away, escape,'
צָרַר 'bind'	צָרַר 'be pressed together, narrow,'
קָצַר 'cut off'	קָצַר 'be cut off, short.'

That the fundamental idea of these so-called intransitive verbal forms was that of state or condition seems also to be shown by the fact that in all probability the intransitive perfects have their origin in verbalized adjectives of the forms *qatıl* and *qatıl*, such as, e. g. כָּבֵד 'heavy' and קָטַן 'small,' which regularly denote conditions and qualities.¹

Granted, then, that the original meaning of these verbs was stative, the fact that a number of them have more or less involuntary meaning admits of a ready explanation. From the idea of becoming, in which originally there was in all probability no idea of volition, the idea of becoming, happening independently of the will, might very readily be developed, and this may

¹ A similar relation exists in Tagalog, the most important language of the Philippine Islands, between the special intransitive verbal forms and the adjectives, both being made by prefixing the particle *ma* to the root, e. g., *ma-árunong* 'know' and 'learned.' Cf. my paper on *Analogies between Semitic and Tagalog*, JHU. Circ. No. 163, p. 66.

have taken place in the case of verbs with more or less involuntary meaning. After this involuntary type was once established, it is of course possible that it should have become independently productive, and that verbs expressing an involuntary action not derived from more original stative verbs should take the intransitive form. Such a process, however, does not seem to have taken place in Hebrew.¹

The so-called intransitive verbs, therefore, to judge from the material in Hebrew, seem originally to have denoted states or conditions or a change of state, while the transitive verbs denoted actions.² The terms most suitable for expressing this distinction are those proposed by Böttcher (cf. p. 150, ft. nt. 1), viz.: *stative* and *active*.

3. THE INTRANSITIVE FORMS.

The so-called intransitive verb in Semitic is of two types, one with *u* perfect, the other with *i* perfect. In Hebrew the latter is the more usual type, the *u* perfect being comparatively rare, occurring only in Nos. 7, 30, 82, 88, 132(?), 139, 145, 161, 324, 342, 363, 410. Both types have *a* imperfect, unlike Arabic, where the *u* perfect has an *u* imperfect, e. g. יָכַר, כָּרָה 'be

heavy,' קָטַן, קָטַן 'be small.'

In verbs mediæ geminatae no *i* perfect occurs except the triconsonantal forms Nos. 284, 417, and the *u* perfect is very rare, occurring only in the 3. *m. pl.* in Nos. 88, 342, 363, e. g. רָמַן 'be high,' *rōmmā* < *rummā* < *rumā*; the intransitive perfect has usually the form קָטַט. This is not to be regarded as a contraction of *qatit* but as a biconsonantal *a* perfect *qat* < *qatta* < *qata* (cf. p. 146, ft. nt. 1). The reason for its use as a special

¹ In Tagalog, on the contrary, the adjectival particle *ma* has acquired a distinct involuntary force. Cf. *ma-patihūlog* 'fall involuntarily,' *ma-patiḍapá* 'prostrate oneself involuntarily' with *mag-patihūlog* 'throw oneself,' *mag-patiḍapá* 'prostrate oneself,' made with active verbal particle *mag*.

² This is borne out by the evidence of the cognate languages Syriac, Arabic, and Ethiopic, where the majority of the intransitive verbs have a stative meaning, and those which are not plainly stative may be more or less readily explained on a stative basis; cf. p. 145, ft. nt. 1.

intransitive form in Hebrew is not clear.¹ Verbs of this class have usually imperfects like יָחַם 'be hot,' $\dot{\imath}\dot{\imath}\dot{\imath}ham < \dot{\imath}\dot{\imath}\dot{\imath}hammu < \dot{\imath}\dot{\imath}\dot{\imath}hamu$, or like יָדַל 'be weak,' made after the analogy of verbs פִּ"פ. Imperfects of the first kind occur in Nos. 106, 204, 319, 325, 362, 369, 417, 431; of the second kind in Nos. 57 (cf. p. 180), 66, 106, 198, 312, 431. Nos. 110, 214 make triconsonantal imperfects; (188) לָעַע makes לָעַע (?). The imperative of the form קָט does not occur; on (54) גָּלַל cf. p. 180. Biconsonantal imperfects of the type יָחַם from verbs פִּ"פ are Nos. 141, 142, 146, 156, 158, 160, 164; biconsonantal imperatives of the type קָט from verbs פִּ"פ, Nos. 153, 166; from verbs פִּ"פ, Nos. 212, 238.

Verbs mediæ infirmæ have almost all conformed to the transitive type. *I* perfects are Nos. 193, 290 (?), e. g. מָת 'die,' $m\dot{a}t < m\dot{u}t$; *u* perfects are Nos. 7, 30, 82, 132 (?), e. g. בָּשָׁ 'be ashamed,' $b\ddot{o}š < buš$; imperfects in $\acute{o} < \acute{a} < a$ are made from Nos. 7, 29, 30, 62, 95, 323 (?), e. g. יָבוֹשׁ; imperfects in *a*, excluding transitive verbs (cf. p. 179 ff.), from Nos. 184, 221, 222, 262 (?), e. g. יָלַן 'spend night.' In verbs of this class there seem to have been two kinds of lengthening; a common Semitic lengthening, represented by the imperfects in \acute{o} , due to the desire to conform the biconsonantal form to the triconsonantal type, and a secondary Hebrew lengthening, represented by the perfects in \bar{e} and \bar{o} , due to the accent.² The so-called shortened imperfects in *a* probably represent the original biconsonantal stage with short vowel like Arabic jussive يَخِف $\dot{\imath}abaf$.

¹ In Ethiopic, also, intransitive verbs mediæ geminatae have short perfects like ሐመ : ḥamma 'be sick.' Here, however, their use as special intransitive forms admits of an explanation. These forms, which are no doubt derived from biconsonantal forms like *hama, were regarded as contracted from *hamēma, etc., just as ለሰሰ : labša 'put on,' from labēsa.

² The transitive perfect forms like קָם 'rise' also represent this kind of lengthening. e. g. $q\bar{a}m < qam$, while Syriac ܩܡ $q\bar{a}m$, Arabic قام $q\bar{a}ma$ represent the first kind of lengthening. Hebrew קָם bears the same relation to Syriac ܩܡ, Arabic قام, as Hebrew מָת bears to Syriac ܡܬ $m\bar{u}t$.

In some cases verbs of both transitive and intransitive types are made from the same stem, viz.: in Nos. 71, 103, 119, 153, 196, 292, 319, 331, and perhaps in 238, where **נָשַׁל** means both 'take off' and 'fall out,' **יָשַׁל** 'to fall off,' and **שָׁל** 'take off,' the forms and meaning being more or less mixed. (Cf. p. 193.)

A complete series of intransitive forms have been preserved in comparatively few verbs. There is a strong tendency for verbs of the intransitive type to pass over to the more usual transitive type, the tendency manifesting itself especially in the perfect, and particularly in the perfect with characteristic *i* vowel.

To this tendency is due the fact that almost all intransitive verbs have transitive form in the first and second persons, e. g. **כָּבַדְתִּי**, **כָּבַדְתָּ** 'be heavy,' **מָתִי**, **מָתָה** 'die.'¹ In the few *u* perfects which occur in Hebrew, the characteristic intransitive vowel is regularly preserved in the first and second persons when these forms occur, viz.: in Nos. 30, 139, 145, 161, 324, 410, e. g. **יָנַרְתִּי**, **יָנַרְתָּ** 'fear,' **בִּשְׁתִּי**, **בִּשְׁתָּה** 'be ashamed,' accented *u* being lengthened to *ō* even in a closed syllable. Short *o* is preserved in an unaccented syllable in **יְכַלְתִּי** Ps. xiii. 5, and **וְיַכְלֹתָ** Ex. xviii. 23. Only in **שָׁכַלְתִּי** 'be childless' Gen. xliii. 14, *i. p.* does the transitive form occur, perhaps an intentional differentiation from **שָׁכַלְתָּ** which directly precedes. In the case of *i* perfects, disregarding verbs **לָ"ה**, intransitive forms have been preserved only in verbs **לָ"א**, Nos. 134, 162 (also **יִרְאֶתָּה** Josh. iv. 24), 196, 313, 386, e. g. **מָלֵאתִי**, **מָלֵאתָ** 'be full,' and in certain forms of the verbs (146) **יָלַד** 'bear,' (166) **יָרַשׁ** 'inherit,' (393) **שָׁאַל** 'ask,' and (290) **פָּוַשׁ** 'spring, skip,'² e. g. **יָרַשְׁתִּים**, **יָרַשְׁתָּם**, **שָׁאַלְתִּיו**, **שָׁאַלְתָּם**, in which last the characteristic vowel occurs in an unaccented closed syllable, and is preserved in its original short form *i*. In the case of verbs

¹ This is also the case in Ethiopic where all transitive verbs except verbs mediæ gutturalis have transitive forms in these persons, e. g. **ለበሐሽ**: *labaska*, **ለበሐሽ**: *labasku* 'put on'; but **ከሐደክ**: *kēhēdka*, **ከሐደክ**: *kēhēdku* 'deny.'

² Cf. Gesenius-Kautzsch, *Hebr. Gr.* § 44, d.

ה'ל, which were more originally 'ל, representing both 'ל and 'ל, however, the tendency to pass from intransitive to transitive type has not been operative in the first and second persons. Here, on the other hand, the intransitive has prevailed completely over the transitive type, all verbs having intransitive forms without regard to their meaning,¹ e. g.

גָּלִיתָ < *galītu* 'reveal,'

אָבִיתָ < *'abiṭa* 'be willing.'

The extension of the *i* vowel in verbs of this class was perhaps due to the influence of the third stem consonant yod. The intransitive is also the only type in the imperfect, all verbs having forms like יִגְלֶה < *iglaḡ*. Stems of this class which are included in the above list are Nos. 2, 8, 24, 33, 45, 61, 78, 83, 93, 99, 150, 172, 175, 179, 181, 194, 220, 230, 236, 249, 263, 269, 276, 289, 294, 297, 299, 300, 322, 334, 339, 340, 343, 351, 354, 367, 372, 373, 379, 392, 395, 401, 413, 428. With the exception of (413) שָׁלַח, which is treated like a strong verb, these stems are not included in the following lists of verbal forms.

Intransitive forms are preserved in both perfect and imperfect in comparatively few cases, viz.: verbs with *u* perfect, Nos. 7, 30, 145, 324, 410; verbs with *i* perfect, Nos. 6, 23, 47, 48, 60, 87, 108, 111, 113, 115, 116, 131, 134, 137, 146, 149, 162, 166, 171, 180, 182, 196, 232, 311, 313, 321, 331, 333, 365, 378, 385, 386, 393, 408, 416, 417, 419, 423; verbs mediæ geminatae with short perfects, Nos. 66, 106, 188(?), 204, 319, 325, 362, 369, 431. The corresponding verbal adjectives which are identical in form with the 3. s. m. perfect, are found in the following of these verbs: *u* perfects, Nos. 7, 30, 324; *i* perfects, Nos. 23, 48, 60, 87, 108, 111, 113, 115, 134, 137, 149, 162, 171, 196, 313, 321, 331, 333, 365, 378, 385, 408, 416, 417; short perfects mediæ geminatae, Nos. 66, 106, 204, 319, 325, 362, 369, 431. In a number of

¹ The intransitive type has also apparently prevailed over the transitive in the first and second persons perfect of verbs mediæ infirmæ in Arabic, all verbs having characteristic *i* or *u* in these forms without regard to meaning, e. g. قُلْتُ *qulta*, *qultu* 'say,' سَرتَ *sirta*, *sirtu* 'journey'; cf. Philippi in *Zeitschrift für Völkerpsychologie u. Sprachwissenschaft*, vol. 20, 1890, p. 355.

these verbs transitive by-forms¹ of the third person perfect also occur, viz.: verbs with *i* perfect, e. g. דָּבַק and דָּבַק 'stick to,' Nos. 6, 23, 47, 48, 60, 146, 166, 171, 182, 321, 333, 378, 385, 393, 408, 419; verbs mediæ geminatae² (66) לָלַךְ and לָלַךְ 'be weak.' Only in Nos. 115, 146, 166 (*impr.*), 331, 333 (*impr.*); 106, 369 (*impr.*), 417, however, are transitive by-forms of the imperfect found, the imperfect in general resisting the tendency towards the transitive type better than the perfect.

In a few instances intransitive verbal forms are preserved only in the perfect, viz.: *u* perfects, Nos. 82, 88, 132(?), 139, 161, 342, 363; *i* perfects, Nos. 21, 38, 72, 118, 193, 209, 272, 284, 290(?), 326, 411; short perfects mediæ geminatae, Nos. 65, 68, 71, 84, 92, 100, 125, 128, 140 (cf. p. 181), 189, 295, 307, 341, 403, 429. The corresponding verbal adjectives are made in Nos. 132(?), 139, 161; 38, 72, 193, 411; 71, 84, 92, 100, 128, 307, 341, 403; in the mediæ geminatae stem 125, an adjective of the form קָטַל is made. Transitive by-forms of the perfect occur in Nos. 82; 272, 290, 326, 411; 403. Nos. 118, 193, 209, 290, 411; 68, 403, have transitive imperfects in *u*, No. 128, a transitive imperative; in the other verbs the imperfect does not occur or is indecisive.

The moribund condition of the intransitive perfect is made still further evident by the fact that a large number of the forms of the *i* perfect occur in pause, a position in which archaic forms that have been lost elsewhere are often preserved. The following occur only in pause, viz.: Nos. 23, 38, 47, 60, 72, 108, 111, 116, 146, 149, 171, 232, 272, 284, 311, 313, 321, 326, 333, 365, 378, 385, 411, 417, 419.

In a large number of verbs, the intransitive perfect is not preserved, intransitive verbal forms occurring only in the imperfect or imperative. Verbs of this kind, excluding those which have been shown to be of the transitive type, cf. p. 179, are the following, viz.: Nos. 1, 3, 12, 14, 17, 22, 25, 26, 29, 32, 34,

¹ By transitive by-forms are meant those transitive forms which have the same meaning as the intransitive; they are to be distinguished from those transitive forms which have meanings opposite to those of the intransitive; cf. p. 193.

² שָׁמַח (417) can not be considered a transitive form, since all the perfect forms follow the analogy of the triconsonantal verb.

35, 36, 40, 41, 46, 49, 56, 58, 62, 67, 69, 70, 73, 74, 75, 85, 86, 90, 94, 95, 96, 97, 98, 101, 103, 110, 119, 120, 121, 122, 124, 126, 127, 130, 133, 135, 136, 138, 141, 142, 144, 148, 153, 155, 156, 158, 159, 160, 164, 167, 168, 170, 176, 177, 184, 186, 187, 198, 200, 206, 207, 208, 211, 212, 214, 217, 221, 222, 224, 225, 227, 237, 238, 240, 241, 243, 245, 246, 252, 262(?), 275, 281, 283, 286, 288, 291, 292, 296, 298, 301, 303, 309, 312, 315, 316, 317, 318, 323(?), 328, 332, 336(?), 338, 345, 346, 350 (*impr.*), 352, 356, 358, 359, 361, 366, 368, 370, 371, 374, 377, 382, 390, 391, 396, 398, 407, 412, 413, 414, 418.

In those Nos. given in italics the perfect does not occur, or is indecisive; in the remainder the perfect has the transitive form. The imperfect has a transitive by-form in the following, viz.: *i* imperfect, Nos. 1, 75, 164, 184, 312; *u* imperfect, Nos. 26, 75, 90, 95, 136, 212 (*impr.*), 214, 221, 222, 237, 240, 288, 298, 328, 396; the transitive imperfect is in most cases the regular form. The former existence of intransitive perfects is indicated by the verbal adjectives in the following: *u* perfects in Nos. 14(?), 22, 26(?), 46, 127, 200, 206, 211, 318(?), 358, 359; *i* perfects in Nos. 3, 22, 85, 94, 97, 119, 120, 138, 167, 187, 227(?), 262, 275, 281, 286, 358, 413, 418, *mediæ infirmæ* 184.

Intransitive imperatives occur from the following verbs, viz.: Nos. 6, 14, 32, 40, 56, 86, 94, 97, 101, 119, 131, 153, 162, 166, 182, 212, 238, 311, 317, 333, 346, 350, 361, 378, 385, 393, 407, 416, 419, *mediæ infirmæ* 7, 29, 30. The imperatives (153) **צַק** and (238) **שָׁל** are intransitive forms used with the meaning of the transitive verbs **יָצַק** 'pour out,' **נָשַׁל** 'take off.'

When no decisive intransitive verbal form is preserved, the intransitive derivatives often give evidence of the original intransitive form of a verb, as e. g. in Nos. 44, 104, 107, 114, 185, 192, 207, 339, 409, etc. When no form of *Qal* is made in a certain stem, intransitive derivatives often indicate the possibility of the former existence of the corresponding intransitive verb, as e. g. in Nos. 10, 20, 37, 59, 64, 117, 173, 194, 308, 424, etc. In some instances intransitive derivatives occurring with transitive active verbs indicate the former existence of intransitive verbs of the same stem, cf. p. 179. Sometimes the apparently intransitive derivatives really belong to transitive active verbs, as in Nos. 205, 260, 357, etc. For the sake of convenience complete lists of the various intransitive derivatives

are here given. A number of nouns which were in all probability originally adjectives, and concrete nouns which seem to be derived from more original abstracts, are included.

Adjectives of the form קטל are made from the following, viz.: Nos. 3, 4(?), 13, 20, 22, 23, 38, 44, 48, 51, 60, 72, 85, 87, 89, 94, 97, 108, 111, 113, 115, 119, 120, 125, 134, 137, 138, 143, 149, 151, 162, 163(?), 167, 169, 171, 187, 190, 196, 227(?), 229, 262, 264, 266, 267, 270, 271, 275, 277, 281, 286, 293, 313, 321, 331, 333, 347, 358, 365, 378, 385, 408, 411, 413, 416, 417, 418, 426, 432. The construct state of the majority of these adjectives has the form קטל, probably due to metaplasm with adjectives of the form קטל c. קטל like שפל 'low,' viz.: Nos. 87, 94, 113, 171, 277, 331, 378, 411. No. 3 and the adjectives ל"א, Nos. 134, 162, 196, however, make their construct regularly, e. g. אבל 'mourning,' מלא 'full;' Nos. 22, 171, 277, make constructs from the form qatl, syncopated from qatıl, e. g. ערל 'uncircumcised.'

Adjectives of the form קטל are made from the following; with feminine קטלה or plural קטלים probably representing original *qatul in every case,² Nos. 5, 10, 14(?), 22, 39, 127, 171, 200, 234, 251, 253, 267, 268, 273, 274, 278, 389; with the feminine קטלה or plural קטלים, Nos. 26(?), 46, 48, 91, 131, 204, 211, 231, 310, 321, 333, 358, 387, 405; feminine or plural does not occur, or is made from the form קטול, Nos. 31, 109, 112, 139, 161, 165, 202, 206, 282, 285, 302, 318(?), 324, 355, 359. In the last two lists, the italicized forms seem to represent the form qatul, as is indicated by the *u* perfects in Hebrew and Arabic; יקש 'bird-catcher' (161) may represent the form qatıl, since the perfect in this case is based on the nominal form. The remainder may represent either qatul or qatıl; בחון 'spy' (31)

¹ Cf. the construct state גדר, ירך, בֶּתֶף, of the nouns גֶּדֶר 'wall,' ירך 'thigh,' בֶּתֶף 'shoulder.'

² Cf. König, *Lehrgeb.* 2, 1, 84; Stade, *Lehrb.* §§ 204, b; 71, 3; Olshausen, *Lehrb.* § 168, b.

is most probably of the latter form. The construct state of the adjectives in the last two lists has the form קטל, e. g.

גָּדֹל 'great,' קָטָן 'small;' in גָּבִיחַ from גָּבִיחַ 'high' (46), the *a* is due to the guttural. No construct state of the adjectives in the first list occurs.

In a number of stems verbal adjectives of both forms קטל and קטל, or an *i* perfect and an adjective of the form קטל are made, viz.: Nos. 22, 48, 131, 171, 267, 321, 333, 358; in Nos. 127, 204 an adjective קטל and verbal noun קטלה are made. This seems to indicate that originally in Hebrew *i* and *u* perfects were made from the same stem, as quite frequently in Arabic, e. g.

ॐ *bahija* 'be joyful,' *bahija* 'be beautiful,'

خزن *ḥazina, ḥazuna* 'be altered for the worse in odor;' etc.

Adjectives of the forms קָט and קֵט from stems mediæ infirmæ are made from the following, viz.: קָט, Nos. 50, 79, 173, 184, 185, 193, 195(?), 219(?), 223, 255, 258, 360; קֵט, Nos. 7, 30, 132(?); adjectives of the form קֶט, from stems mediæ geminatæ from the following, viz.: Nos. 43, 64, 66, 71, 84, 92, 100, 106, 114, 128, 199(?), 201, 204, 247, 259, 307, 319, 325, 337, 341, 362, 369, 376, 403, 431; adjectives like בָּלָה from stems ל'ה, from the following, viz.: Nos. 33, 61, 78, 99(?), 150, 175, 194, 220(?), 230, 263, 276, 300, 334, 339, 340, 351, 354, 372, 401. The construct states of the last class have forms like קִשָּׁה 'hard.' These adjectives are usually regarded as contracted from the form *qatal*, e. g. *qušē* < *qašai*, and as the regular contraction of the diphthong *ai* is 'ֿ, הֿֿֿ which represents the same sound is perhaps more original than הֿֿֿ, the more original form being preserved in the construct connection, while the ending of the absolute state has been modified; cf. feminine nouns like מִסָּה constr. מִסָּת 'mare.'

Infinitives of the form קטל are very rare, occurring from stative verbs only in Nos. 106(?), 110, 407, 423; in active verbs like שלח 'send,' the *a* of the infinitive is due to the guttural. Infinitives of the form קט from stative verbs mediæ geminatae are made in the following, viz.: Nos. 204, 319, 362, 369, 409; all except the last may be simply the verbal adjectives of the same form used as a noun; in 369 the infinitive form may be perfect.¹ In Nos. 43 and 349, the *a* of the infinitive is probably due to the guttural ר. Infinitives of the form קוט from verbs mediæ infirmæ are made from the following, viz.: Nos. 29, 30, 192, 221, 222, 256, 353; in 400 the form is probably corrupt. Infinitives of the form קטלה are made from Nos. 6, 23, 340, 433; of the form קטלה, from Nos. 87, 97, 105, 162, 332, 344, 386; of the form קטלה "ק, from Nos. 46, 60, 97, 105, 108, 134, 203, 205, 333, 357, 358, 412, 419. In 203, 205, 357 the form קטלה is used as the infinitive of active verbs. These last three classes are verbal nouns used as infinitives.

As simple verbal nouns, קטלה occurs in Nos. 6, 8, 14, 23, 45, 80, 183, 225, 226(?), 257, 271, 291, 308, 320, 392(?), 402, 404, 413, 430; קטלה, in Nos. 32, 69, 87, 89, 93, 97, 102, 104, 105, 122, 129, 152, 162, 168(?), 176, 205, 250, 254, 260, 276, 313, 320, 327, 348, 361, 375, 377, 378, 383, 385, 386, 395, 420, 423, 424, 425, 432; קטלה "ק, in Nos. 13, 97, 101, 105, 117, 119, 131, 134, 272, 273, 280, 282, 335, 346, 378, 421. In Nos. 129, 205, 260, 395, 404, 421, they are nouns of action from active verbs.

Verbal nouns of the form קטל are made from the following, viz.: Nos. 23, 27, 74, 107, 138, 165, 174, 178, 228, 235, 266, 281, 286, 313, 365, 374, 378, 384, 415, 418(?); verbal nouns of the form קטלה, which is a specially frequent derivative from verbs of utterance like זעק 'cry out,' from the following, viz.: Nos. 13, 16, 18, 37, 42, 56, 58, 68, 74, 80, 86, 98, 120, 147, 157, 168(?), 207, 208, 210, 213, 216, 218, 226(?), 235, 252, 265, 269, 301, 303, 315, 317, 329, 330, 333(?) 341, 351, 352, 364, 366, 391, 393, 397, 407, 417, 422, 433; נשמה 'breath' (239) is

¹ Cf. König, *Lehrgeb.* i, 339; Stade, *Lehrb.* § 619, b; Olshausen, *Lehrb.* p. 581.

to be regarded as concrete, קָלַלְה 'cursing' (325) is made from the *Piel* קָלַל 'curse' on the analogy of בָּרַכְה 'blessing'; verbal nouns of the form קָטַלְה are made from the following, viz.: Nos. 1, 19, 20, 28, 36, 42, 51, 52, 55, 59, 76, 77, 127, 136, 166, 191, 196, 197, 204, 209, 233, 279, 293, 314, 388, 393, 399, 423, 427. The verbal nouns in Nos. 248 and 394 are also to be regarded as intransitive.

The same tendency to pass over to the transitive type which was observed in connection with the verbal forms is found also to a certain extent in the nominal derivatives. A number of stative verbs, especially such as are more or less active in meaning, make participles and infinitives of the transitive form.

Verbs with intransitive form in perfect or imperfect, excluding those which belong to the transitive type (cf. p. 179), which make such derivatives are the following, viz.:

1) Participles of the form קָטַל. Nos. 1, 6, 26, 32, 35, 36, 40, 56, 58, 67, 75, 85, 90, 98, 110, 118, 122, 133, 136, 146, 148, 156, 161, 164, 166, 170, 182, 187, 209, 214, 224, 237, 246, 252, 298, 317, 318, 328, 332, 345, 361, 370, 386, 390, 391, 393, 407, 408, 411, 416, 417, 419.

2) Infinitives of the form קָטַל, s. קָטַלְי (suffixal forms like בָּלְעִי, צִעֲדָךְ are indecisive, as they may represent either קָטַל or קָטַלְי; cf. Gesenius-Kautzsch, *Hebr. Gr.* § 61, *δ*) Nos. 1, 6, 26, 32, 34, 40, 46, 56, 67, 75, 86, 90, 94, 97(s.), 98, 118, 122(?), 136, 137, 162, 167, 177, 182, 186(s.), 200, 209, 214, 225, 240, 272(s.), 288, 317, 328, 333, 358, 361, 378, 382, 385, 386, 390, 393, 403, 407(s.), 411, 414, 419; מָלֵא (196) makes the infinitive מָלֵא after the analogy of verbs לָלַח¹ and similar forms are made also in Nos. 98 and 386; the infinitive of יָכַל (145) is the feminine form יָכַלְת, a form which is also made from No. 137.²

¹ Cf. Gesenius-Kautzsch, *Hebr. Gr.* § 74, *h*; also König, *Lehrgeb.*, I, 611; Stade, *Lehrb.*, § 201, *b*.

² These infinitives may represent the feminine of a form *qatal*, as in יָשַׁלְשַׁת 'three'; cf. Stade, *op. cit.* § 208, *c*; Olshausen, *Lehrb.*, p. 333, *top*.

3) Passive participles of the form קָטוּל, Nos. 6, 32, 35, 74, 90, 118, 146, 182, 186, 237, 246, 272, 386, 393, 410, 411, 412, 416(?), 419; these are in some cases simply verbal adjectives, as e. g. in Nos. 32, 410, etc.

Verbs ל"ה which make participles like גָּלָה as well as verbal adjectives like בָּלָה are Nos. 78, 263, 334, 340, 401; in all except Nos. 78, 340, the verbal adjectives are used only as nouns.

Verbs *mediae infirmæ* have for the most part completely passed over to the transitive type: participles of the form קָט are therefore to be expected from any verb of this class, whatever the meaning; such participles from verbs which have preserved intransitive form either in verbal forms or derivatives are made in Nos. 29, 50, 80, 82, 192, 219, 222, 353.

Semitic Epigraphical Notes.—By CHARLES C. TORREY, Professor in Yale University, New Haven, Conn.

I.

AN OLD HEBREW SEAL.

THIS seal was purchased in Sidon, from a native dealer, and is now in my possession. It is a scarabæoid, longitudinally pierced. The material is agate, nearly white, and the inscribed surface measures three-quarters of an inch in length. The accompanying fac-simile, made from a plaster cast, is twice the size of the original. The seal has been badly chipped, but for-



tunately the inscribed face is intact, and the letters are all beautifully clear. It reads:

לִירוּשָׁע בֶּן עִשָּׂיָה

“[The seal] of Joshua, son of Asaiah.”

The name Asaiah (“Yahwè made”) is found in this same form on a Jewish seal published by Clermont-Ganneau (*Recueil*, iii., § 32). The form עִשָּׂי occurs on another seal in the British Museum (see Cooke, *North-Semitic Inscriptions*, p. 362); עִשָּׂיָה is found in the Old Testament, 2 Kings xxii, 12; cf. the names עִשָּׂהאל, 2 Sam. ii, 18, and עִשָּׂיאל, 1 Chr. iv, 35.

The Old Hebrew characters of this inscription are of extraordinary beauty, as can be seen from the fac-simile. Few specimens of writing in the old alphabet have been found which could compare with it in this respect. There is nothing to indicate the period to which it belongs. So far as any characteristic forms of letters are concerned, its owner may have lived at any point in Hebrew history, from the early kingdom down

to the time of the Roman rule. Attention may be called, however, to the resemblance which these characters bear to those of the Siloam inscription. The resemblance is especially noticeable in the case of the letter י , which has the same peculiar shape, pointed at the top, and the same slant. The נ , though of a very common type, also recalls the Siloam inscription both in the shape of its head and in its long shank. The same may be said of the letter ל . The ה , again, has the same unusual breadth and graceful form as in the other inscription. These resemblances can of course be allowed but very little weight; they do, however, add to the interest attaching to the seal.

Such a specimen of Hebrew calligraphy as this one, moreover, deserves a warm welcome. Attention has already been called to the beauty of the characters in which it is inscribed. Few, if any, alphabets are more pleasing to the eye than the old North Semitic at its best, and the characteristic Hebrew form of it shown here represents one of the finest developments, artistically, which it has experienced. In view of our almost total lack of knowledge of the native art of the Hebrews, such testimony as this to their sense of form and proportion is of great value. And it would certainly be hard to find any single specimen of the script which is more beautifully executed than this one.

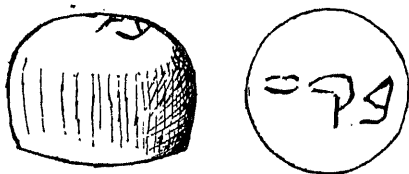
Instead of the customary line, or double line, to divide the field in halves, a somewhat more elaborate device is used here, the origin of which I do not know. At the end of the second line of writing is a star of six rays.

II.

AN INSCRIBED HEBREW WEIGHT.

The weight here described was bought by me in Jerusalem, of a native dealer in antiquities, in the spring of 1901. I could learn nothing definite as to the source from which it came. Its form, as will be seen from the accompanying drawing (slightly larger than the original), is the same as that of the four interesting stone weights bearing the problematic inscription ננך , most fully described by Clermont-Ganneau in his *Recueil*, iv., 24 ff. Three of these, it will be remembered, were found by Dr. Bliss in his excavations for the Palestine Exploration Fund at Tell Zakariyâ; the fourth was unearthed at the village 'Anâta, north of Jerusalem. In the present case, the material

is red marble (specific gravity 2.658); whether or not other weights of this same material have been found, I do not know. One of the four just mentioned is described as "a reddish stone," but nothing more definite is said about it.



The fact of chief importance connected with this weight, however, is the legend which it bears. It is inscribed with the Hebrew word **בֶּקֶע**, *bega'*, "half"; that is, presumably, half of a shekel. It weighs 5.8698 grams, or 90.58 grains; accordingly, the unit (i. e., the shekel) was 11.74 grams, or 181.17 grains. The Hebrew "shekel," as we know, was a standard which varied considerably, though the limits of its variation are still unknown. In the familiar silver coinage of the Jews, the old Phoenician stater of 14.92-14.96 grams was the basis. But there were other norms, and one of these, belonging to Babylonia, comes very close to the unit of our **בֶּקֶע** weight. The Babylonian (or Persian) silver shekel of the "royal norm" weighed about 11.50 grams (see the tables in Head's *Historia Numorum* and Hill's *Handbook of Greek and Roman Coins*), and it may well be that we are to recognize the result of Babylonian influence in the use of a standard in which the half-shekel was (approximately) 5.87 grams. It is further noticeable that this weight bears no obvious relation to the **נֶזֶף**, which seems to have been equivalent to a little more than 10 grams. The four weights above mentioned weigh, respectively, 9, 9.5, 10+,¹ and 10.21 grams, and possibly represent a still further debased standard.

As for the word **בֶּקֶע**, it has heretofore been known only from two passages in the Old Testament. In Gen. xxiv, 22, Abraham's servant gives the girl Rebecca a nose-ring whose weight was a *bega'*; and in Ex. xxxviii, 26, the same word is used in stating the amount of the poll-tax (also described as **מַחְצִית**

¹ So estimated. This stone (the one found at 'Anâta) had been pierced, and its original weight accordingly reduced.

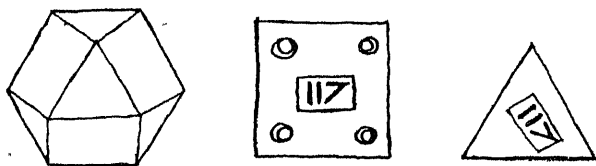
השקל). It is remarkable that the word should not be found elsewhere; the fact deserves notice, too, that in both of these passages the Targum translates בקע by the non-committal תקלא, "weight."¹ Are we to conclude from this that the word בקע, meaning "half-shekel," was obsolete at the time when the Aramaic translation was made?

III.

A PHOENICIAN (?) BRONZE WEIGHT.

While buying some old copper coins in Jaffa from a native resident of that city, I happened to pick up this small bronze object, presumably a weight. Its owner attached no importance to it, but "threw it in" with my purchase. I have seen nothing else like it, nor has any one of the Orientalists to whom I have shown it been able to give me any information regarding it. Whether it is ancient, or modern, I do not know. It looks like an antique.

As the figure (somewhat enlarged) shows, it has the form of a crystal of fourteen sides. The angles are not quite regular;



no one of the six quadrilateral faces is a perfect square, nor is any one of the eight triangles equilateral, though the variation is so slight as to be hardly noticeable. In every one of the fourteen faces is an incised oblong, containing what appears to

¹ These are the two passages upon which those scholars rely who assert that the Aramaic תקלא, תקל was sometimes used to mean "shekel." Hence the current interpretation (almost unchallenged, but hardly tenable) of MENE, TEKEL, UPHARSIN; and every recent commentator on Dan. v, 25 remarks that in Gen. xxiv, 22 and Ex. xxxviii, 26 תקל means "shekel." On the contrary, the word has this meaning neither in the two passages named, nor anywhere else.

"Half-shekel," in the Targum, is regularly פלגות סלעא.

be the Phoenician numeral 12.¹ The depth of the incuse varies, but the characters—always thin and clearly cut—are never quite flush with the surface. In addition to this marking, each one of the six quadrilateral faces is stamped with four small circles, or crescents, somewhat obliquely driven. These are not regularly placed, except that, roughly speaking, each of the four corner spaces of the quadrilateral is occupied by one of them. In one case, a *fifth* circle is stamped directly into the incused oblong, in such a way as to obliterate the character which represents the numeral 10. The weight of the object is 14.9566 grams, or 230.82 grains. It is this fact, especially, which has led me to characterize it, tentatively, as "Phoenician," for this is just the weight of a Phoenician silver stater. Head, *Historia Numorum*, gives the standard as about 230 grains, and Hill's *Handbook* as 14.92–14.96 grams. The numeral "12," moreover, corresponds admirably to this conclusion, for the Phoenician coinage (including the Jewish) was based upon the system of twelve parts; a fact due, no doubt, to Greek influence.

IV.

ON A PALESTINIAN 'FORGERY.'

Under the title "Fälschung?" Dr. Messerschmidt contributes to the *Orientalistische Literatur-Zeitung* for June 15, 1903 a discussion (with fac-simile) of a certain curious inscribed object recently brought to Germany from the neighborhood of Jerusalem. It is a disc of baked clay, about two inches in diameter, reproducing very clumsily and on a much enlarged scale a well-known coin of John Hyrcanus. Nothing more need be said, of course, as to the value of this 'antique'; it does not even deserve to be taken so seriously as would be implied in giving it the name 'forgery.' Messerschmidt is by no means inclined to regard it as genuine, and yet expresses himself as mystified on two points: (1) How did it happen that *clay* should be chosen as the material for forging a bronze coin? and (2) Why did its owner, who was a workman of the lower class, appar-

¹ The character for 10 is somewhat unusual, to be sure, though not without its analogies. It may be, of course, that I am wrong in supposing this device to be the numeral 12, or indeed a numeral at all.

ently make no effort to sell it, and eventually part with it for a mere trifle? Do not these things, he asks, speak against the conclusion that it is a forgery?

The fact is, this is one of a class of objects not infrequently hawked about the streets of Jerusalem by certain vagabonds of a familiar type—half beggar, half rascal. The things are made by pressing clay into forms which some idler has amused himself by fashioning. The conditions which produce such works of art as this one are a little spare time, a sense of humor, and the remote possibility of gulling some brother rascal, or perhaps even a tourist. It would take perhaps an hour to whittle out of wood such a form as the one from which this 'coin' was made. I have frequently been offered just such discs in Jerusalem, the would-be vender always accompanying his offer with a broad grin. One of these objects now in my possession (a clay disc, about two inches in diameter, pressed from a form) bears a representation of Eve and the serpent, with a few meaningless letters appended. Apparently there was never a thought of getting more than a few paras each for these 'inscriptions.' It is not surprising, then, that the native workman mentioned in this case did not show any great eagerness to turn his property into money.

In a foot-note to Messerschmidt's article (col. 241), the editor, Dr. Peiser, expresses the opinion that this clay disc [or rather, its matrix?] belonged to the apparatus of a forger of coins, and formed a part of a cylindrical mould similar to those which have been found in Egypt (he might have said, throughout the whole breadth of the Roman empire, from the British Isles to Asia). But the hatchet-carved monstrosity before us is in no way related to the apparatus to which he refers, or to its product, beyond the fact that it is made of clay and happens to have borrowed its pattern from a coin. The moulds employed for the forgeries in question are of course made from the genuine coins, and are designed to receive molten metal. They give at least an exact reproduction; in fact, it is not usually safe to pronounce these clay cylinders the work of forgers, inasmuch as the official copper coinage of the later Roman empire, both Eastern and Western, was very largely executed in just this way. As for this worthless Palestinian trinket, it is certainly a misuse of language to call it a 'forgery.'

V.

ADDITIONAL NOTES ON THE BOD-‘AŠTART INSCRIPTIONS.

Since¹ the publication of my former paper (vol. xxiii. of this Journal, pp. 156-173) on the inscription recently found in the ruins of the temple of Ešmun, near Sidon, the literature of the subject has grown rapidly. Besides the publications of Berger and Lagrange (see the foot-note), the inscription has been discussed by Clermont-Ganneau (*Recueil*, v., pp. 217-267), Hoffmann (*Theol. Literaturzeitung*, 22. Nov. 1902; 31. Jan. 1903), G. A. Cooke (*Text-Book of North Semitic Inscriptions*, 1903, pp. 401-403), Lidzbarski (*Ephemeris* ii., pp. 49-54), and others. Especially the excellent fac-similes published by Lagrange and Berger have settled all doubt as to the correct reading of the several inscriptions—or rather, the one inscription in its several slightly varying forms. Still other inscribed stones, moreover, have been unearthed from the temple-ruin, one of which exhibits such important variations from the typical reading that I have reserved the discussion of it for a separate note (see VI., below).

For the sake of convenience I repeat the complete text, the lines corresponding to those of the inscription which I published and discussed in my previous article. I have also indicated the division into clauses which seems to me to be required. Regarding this division I shall have more to say below.

מלך בר עשתרת מלך צדנם בן בן מלך
 אשמנעזר מלך צדנם, בצדן ים
 שמם רמם ארץ רשף מצדן משל, אש בן
 וצרנשל אית הבת ז, בן לאלי
 לאשמן שר קדש.

The only letters here concerning which there can be any question are the third and sixth in line 4; in each of these cases it is altogether uncertain whether the character is ך or ר. In one

¹ I think I may fairly claim to have been the first to publish the Bod-‘Aštart inscription. Berger's *Mémoire sur les inscriptions du temple d' Esmoun à Sidon* was put in distribution Oct. 3, 1902; Lagrange's article appeared in the number of the *Revue Biblique* dated Oct. 1, 1902. The number of this Journal (vol. xxiii., First Half) which contained my article was issued in August, 1902, the actual mailing of the volume taking place on Sept. 9 and 10.

point I have been obliged to change my former reading; the first character in line 4 is ך, not ך, as is shown by the fac-similes since published, especially plate iv. in Lagrange's article (*Revue Biblique*, Oct. 1902, pp. 515-526).

The translation:

"The king Bod'-Astart, king of the Sidonians, grandson of king Ešman'azar, king of the Sidonians: reigning in Sidon-on-the-Sea, 'High Heavens,' and the Rešeph Land, belonging to Sidon: who built and solidly walled (?) this house: he built it for his god, Ešman, the Holy Lord."

משל . . . ים בצרן, "reigning in Sidon-on-the-Sea, etc."

Curiously enough, no one of the translators of the inscription, excepting myself, has connected the word משל with the king Bod'-Astart, although this is the connection naturally suggested by the context (and especially by the preposition כ in ים בצרן) —and indeed, as it seems to me, the only connection possible. Clermont-Ganneau, for example, follows the title of the king with a long list of supposed place-names, contained in a clause which ends nowhere. Lidzbarski's rendering is still worse, for he does not even give the writer of the inscription time to forget how he began his clause, but makes him end it with ים בצרן: "König B-A., &c., Enkel des E., &c., in Sidon des Meeres" (period). But what could this mean? And what sort of a Semitic sentence would this be? Grammar and usage have their rights. The preposition כ, moreover, cannot be disposed of so easily. Cooke (*North-Semitic Inscriptions*, p. 401 f.) boldly supplies the word "reigning," but this he has no right

¹ I have adopted here the spelling Bod-, rather than Bad-, in deference to the prevailing custom, though I believe the latter form to be the one in accord with modern transcriptional usage. We transcribe the Arabic فَضْل, for example, by *faḍl*, not *foḍl*, or *fuḍl* (English *u* in *but*), though the sound of the vowel is probably the very same one which was heard by the Greeks who transliterated Bod- in the Phoenician name. In short, our accepted system of transcription is essentially etymological, not phonetic.

² Of course, in this and all the similar cases, I have employed the Hebrew vowel-pointing merely as the most convenient way of indicating the grammatical form, or the nature of the word; not because I have any idea that the Phoenician pronunciation closely resembled that of our Massoretic Hebrew.

to do. The one thing obviously needed is the participle מִשַּׁל (similarly employed, be it noted, and with כ as its complement, in the Ešmun'azar inscription); why not use it, then, since it is here?

The *second* principal clause of the inscription, then, ends with מִשַּׁל (the *first* ending with the second צִדְנָם in line 2). The *third* clause contains the most difficult passage of all; as to its extent, however,—after the second clause has once been marked off as above,—there can be no question; it ends with the pronoun ה. At this point, again, my own attempt at translating the inscription has thus far stood alone; all the other renderings treat אֵת הַבַּיִת as the object of the following verb בָּן, rather than of the one which precedes. Now, aside from the weight of the arguments just set forth, there is very plain evidence that the author of the inscription intended to make a principal pause after the pronoun ה. One of the two inscriptions published by Berger actually ends at this point! The stone of which he gives the fac-simile (*op. cit.*, Plate ii.) contains only half of the inscription, it is true (the other half evidently stood on the adjoining stone¹); but the point at which the lettering ends—near the beginning of the third line—leaves no room for doubt that this inscription, though otherwise like its fellows, originally omitted all that elsewhere follows the words הַבַּיִת. Still further evidence—equally conclusive—is furnished, if I am not mistaken, by the new inscription of this series which is treated below (see VI.). In this case, also, the words “he who built this house” form a clause by themselves. This clause-division of the inscription, with the interpretation which it involves, I venture still to think—as I have thought it from the first—the only defensible one.

שִׁמְשֵׁם רָמָם. That this is the name of a district belonging to Sidon (מִצְרֵן, line 3) seems tolerably certain. This interpretation has also been adopted by Clermont-Ganneau and Cooke.

¹ Lidzbarski's theory, that an ignorant or careless workman carved only the right hand half of the inscription and omitted the rest, is untenable. It fails utterly in the last line, of which אֵת הַבַּיִת could not possibly have been the *half*! The fact that there is a margin left at the end of the stone cannot be used as an argument. We could not expect the lettering to be carried to the edge, especially on stone so very soft and fragile as this.

Lidzbarski objects, that it would be "wunderlich" as a place-name. But then, every people has a certain number of place-names which are "wunderlich" when approached from the side of etymology and the dictionary; this one is by no means remarkable.¹ What is far more important is the fact that this is the same place which is called **שָׁמֶם אֲרָרִם** in the (later) inscription of Ešmun'azar; and that this is the very same temple "of Ešmun, the Holy Lord," built "near the spring (עַן יְרֵלָל) in the mountain," which is there mentioned. The several independent grounds of this conclusion I have already set forth at length, in my former article; the one of them which is perhaps the most striking of all, the presence of the **עַן יְרֵלָל** ("conduit-spring"?) near this temple-ruin, has apparently escaped the notice of all those who have discussed the inscription. Clermont-Ganneau objects to the identification of the two temples, that the Bod-'Astart ruin could not be described as "in the mountain (**בְּהָר**)," inasmuch as it stands only about fifty meters above the plain. But this argument is less weighty than it seems. The deciding question is *not* how high this place actually is, but whether the popular speech would describe it as "in the mountain." And on this point there is certainly little or no room for doubt. The contrast between the coast plain and the mountain district is nowhere more sharp than at just this point, where the outpost hills of the Lebanon rise steeply from the level strip and run back in steadily increasing height. Any native of modern Sidon would be certain to speak of this ruin as *fi-l-jebel*, "in the mountain"; I have myself repeatedly heard them thus describe it. And it is in every way probable that the ancient Sidonians spoke of it in the same way.

Lidzbarski, replying to Clermont-Ganneau, cites line 16 f. of the Ešm. inscription against the interpretation of **שָׁמֶם אֲרָרִם** as the name of a district. The passage reads: "It was we who built . . . the temple of 'Astart in Sidon-on-the-Sea, and who made 'Astart to dwell in **שָׁמֶם אֲרָרִם**; and it was we who built a temple to Ešmun . . . in the mountain and made him to dwell in **שָׁמֶם אֲרָרִם**." Of this, Lidzbarski says: "Das ist

¹ Lidzbarski's "**אֲרָרִם** **רֶשֶׁפֶם**" (so he reads), would be a much more extraordinary name, it seems to me. But it is easy to accuse one another of stumbling here, where we are all in the dark.

Unsinn, wenn שָׁמַם אֲרָם ein Ort ausserhalb von צֶדֶן אֲרָן ים sein soll." But this is a very strange assertion. How does Lidzbarski know that the induction of Astarte, mentioned in the second half of line 16, had any relation to the temple mentioned in the first half? The very fact that the name of the goddess is repeated might have shown him the probability of the contrary conclusion. The 'induction' of a god into a new precinct, or a new temple, was an important ceremony by itself. It might (we should suppose) take place at any time, whether the building in question was old or new, and whether built by the dedicating parties or by others. An old building might be consecrated for a new purpose, or, doubtless, to a new god. There is not the least difficulty in supposing that *two* temples, in different parts of the city, are referred to in Ešm. line 16.¹ One of these, the one in Sidon-on-the-Sea, Ešmun'azar and his mother built. The temple of Ešmun, referred to in line 17, was the one which had been *begun*, at least, by Bod-'Aštart.

The chief importance of this conclusion lies in the fact that it carries with it the order of accession of these two kings. If the temple on the Auwali is the one referred to in the Ešm. inscription, as the facts thus far known to us seem to show,² then it is certain that the reign of Bod-'Aštart preceded that of Ešmun'azar. No other commentator on the new inscription, so far as I know, has reached this conclusion, but all have assumed the reverse order. The reason for the assumption has been, doubtless, the supposition that the father of Bod-'Aštart never came to the throne; but this supposition has now been proved false, as will appear below.

אֲרָן רֶשֶׁף. Still another argument in favor of the division and interpretation which I have advocated is the fact that it frees us from the worse than awkward רֶשֶׁפֶם. "Rešeph-District" presents no difficulty. The enumeration of the three places without the use of the conjugation ם has many analogies, both Phoenician and Hebrew, as Clermont-Ganneau remarks. These three districts were undoubtedly large and important. It is of course useless, in view of our total lack of knowledge of the conditions in the city at this time, to conjecture why they received mention in this inscription. One might think of a dozen plausible reasons.

¹ See, on this whole question, my former article, pages 162-164.

בן אש, "who built." These are certainly just the words we should expect to see in an inscription telling of the erection of a temple. So Ma'sûb, line 2, for example; compare also the constantly recurring formula אש יתן, אש נדר, etc., in dedicatory inscriptions.

וצרנשר. It is certainly not easy to determine what should be done with this group of letters. It contains a verb; this much can be said with confidence. The third letter, or the sixth, or both, may be ד rather than ר. The reading צרן שר, "and Sidon-in-the-Country" (now adopted by Clermont-Ganneau), which of course first suggested itself, I clung to for some time; it was one of those which I discussed in presenting my paper to the American Oriental Society in April, 1902. But nothing can be done with it; any mention of Sidon—whether the whole or a part of the city—is altogether out of place here, even if אשבן be read in some other way. As for the reading צרן שר, that seemed to me to be absolutely excluded by the fact that Sidon is *feminine*. The usage is unvarying, from the צירון רבה of the Old Testament down to modern times, and is strengthened besides by a very distinct personification; recollect how the head of a woman, representing the city, appears on the Sidonian coins, and how she is called (also on coins) the "mother" of various cities and colonies! Lidzbarski proposes to read not only צרן שר. "Sidon herrscht," but also צרן משל. "Sidon regiert," in line 3. But neither is permissible; any Phoenician would certainly have written שרת and משלת,¹ like רבת, מלכת, אדרת, etc. Verb-forms שר and משל would of course be possible in Phoenician with a feminine noun; but the verb in the perfect tense would be quite out of place here, and neither Lidzbarski nor any other interpreter of the inscription has proposed to use it.

Possibly צרן = Arabic رصن, "to complete," or (4th stem) "to make solid or compact." שר could then be the verb (denominative from שור) "walled," the two verbs being

¹ If Lidzbarski were to be shown a coin bearing the legend ירושלים הקדוש, he would at once pronounce it a forgery, and rightly. Nor would any such combinations as ציון משל, ציון שר, etc., be possible in Hebrew.

joined without ׀ in the way so common in Syriac. The whole clause would then be translated: "Who built *and solidly walled* this house." In view of the enormously massive character of the wall of this temple-enclosure, these words would be most appropriate.

לאשמן שר קדש. Lidzbarski remarks, that it is "Geschmacksache" whether **קדש** or **קדש** (Kadesh) is read here.

But *is* it merely a matter of taste, and is there no preponderance of probability here? We know from the Ešm. inscription, lines 9 and 22, that the gods were regularly termed **קדש**, "holy,"

by the members of this dynasty—as doubtless through all Phoenicia. A more natural title than "Ešmun the Holy Lord," accordingly, no one could require. But on the other hand, anything more far-fetched than this supposed allusion to Kadesh(!) it would be hard to find. Why add to the difficulties of the inscription, which are already great enough, by discarding the obvious and simple and dragging in the remote and obscure? Thus we see one scholar and another proposing here, in place of **אש בן**, "who built," a proper name "Ešbon" or "Ešbūn"(!); in place of **משל**, "reigning," the combination

"Sidon of Mašal" (mere nonsense); and finally "Kadesh" in place of **קדש**, "holy." The (manufactured) Hebrew phrase,

קדש עין משפט במדבר (cf. Ešm. line 17), which seems to have led Clermont-Ganneau astray, is not remarkable as a mere verbal coincidence—and it is nothing more than this.

Not a little conjecture has been wasted on the question, why the inscribed faces of these stones were all turned toward the inside of the thick temple-wall, where they could not be seen. One commentator thinks of political reasons; another, that the stones originally formed part of another building. But no one who has seen and handled the stone itself can be in doubt as to the true reason: it was simply in order that the inscriptions might be preserved. This is limestone of the softest and most friable kind, broken by any blow, easily cut with the fingernail, and rapidly worn down by weathering. If King Bod-'Aštart had left these records of his building where they were exposed to the air and the rain, they would very soon have disappeared. He was not concerned to inform his contemporaries, in this way, that he had built the temple—they all knew it;

what he wished to do was to make a record for posterity. So the Babylonians did, with their stamped bricks; so we do to-day, with our filled 'corner-stones.' Therefore he employed every possible means of preserving the letters of his inscriptions, filling them in with red paint, and burying the inscribed faces in the core of the wall. The event has justified him, for his record has been preserved, in good condition, for more than two thousand years.

A word is in place here regarding the stone which I purchased in Sidon, and published in fac-simile in my former article in this Journal. Some of those scholars who have mentioned it have taken for granted, not unnaturally, that it is in New Haven. I am sorry to say that this is not the case. At the time when my article was written, I was still in uncertainty as to how the stone would be disposed of. In the summer of 1902, when my account of the inscription was ready for publication, I wrote to the friend in Syria with whom I had deposited the stone, telling him of my intention to write at once to Constantinople, informing the officers of the Imperial Museum as to its whereabouts, and putting it at their disposal. I had strong hopes, it is needless to say, that inasmuch as the Museum already possessed good examples of the inscription, I might be allowed to keep this one for Yale University. But to my surprise, I received answer from my friend that he had already *sold* the stone for me, since he supposed that my chief interest in it was to use it for publication, and believed that I would be glad to have it finally off my hands. As I had left him no instructions, nor sent him any word regarding it for more than a year, I could not blame him for taking this step, in which he acted purely in what he believed to be my interest. I suppose that the stone is now in Paris, though I have heard nothing further from it.

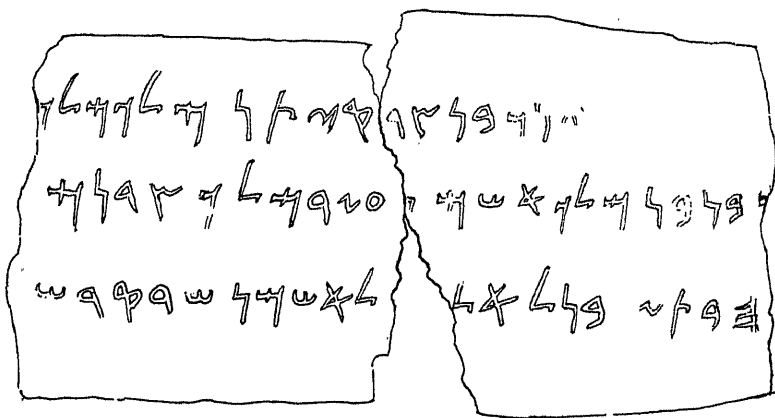
VI.

A NEW INSCRIPTION FROM THE TEMPLE OF EŠMUN.

This is another of the Bod-‘Aštart inscribed stones, which is now in Beirut. I understand that a full description of it, accompanied by a photograph, is already in process of publication, and will probably appear before these notes of mine are published. Winckler has a brief notice of it in the *Oriental-*

istische Litteratur-Zeitung for June 15, in which he gives the text on Schröder's authority.

My first knowledge of the inscription was derived from a photograph of the stone brought me (June 19th) by my former colleague, Dr. Warren J. Moulton, of New Haven, who had himself just returned from a visit to Syria. It was at once plain from the photograph (which is a very good one) that the new inscription, while in the main identical with those previously found, makes a very important addition to our knowledge, in that it gives the name of the father of Bod-'Aštart. It was also plain that the inscription is incomplete at the beginning of each line, a piece of considerable size having been broken away from the stone here. The evidence of



this latter fact is abundant and conclusive. At the beginning of the *first* line, before the letters ננ, which are the first which can be distinctly made out, there is barely room for six—or at most, seven—letters. Yet this ננ can have formed only part of a word, and aside from the additional letter or letters belonging to it, we have to provide space for the name ברעשתרת (seven letters!) at the very least, and presumably for a preceding מלך in addition. We should certainly expect, moreover, in view of the unvarying usage in the other inscriptions, that this one also would begin with the complete formula: בר מלך צרנם עשתרת מלך צרנם. At the beginning of the *second* line, the end of a letter is plainly visible (see the drawing). This cannot be the last letter of the incomplete word, [מלכום], with which

the first line ends, for then we should have the anomaly of lines beginning unsymmetrically. In all of these inscriptions, the first letters of the several lines are in the same perpendicular. At the beginning of the *third* line, the particle אִית, at least, is required before the הִבַּת. It is very noticeable, finally, that as the inscription now stands Bod-‘Astart is not called ‘king of Sidon,’ nor even ‘king’ at all! The מֶלֶךְ מַלְכָּם at the end of line 1 would most naturally be referred to the name (Sedeq-yaton) which immediately precedes, just as the מֶלֶךְ צִדְנִים of line 2 certainly belongs to the preceding Ešmun‘azar.

Immediately upon receiving the photograph, I restored the whole inscription as follows:

מֶלֶךְ בִּרְעִשְׁתֶּרֶת מֶלֶךְ צִדְנִים בֶּן צִדְקִיתָן מֶלֶךְ מַלְכָּם
 ׀ מֶלֶךְ צִדְנִים בֶּן מֶלֶךְ אֶשְׁמֻנְעֶזֶר מֶלֶךְ צִדְנִים
 אִישׁ בֶּן אִיתָּהּ הִבַּת זֶ בֶּן לֵאלִי לֵאשְׁמֻן שֶׁר קִדְשׁ.

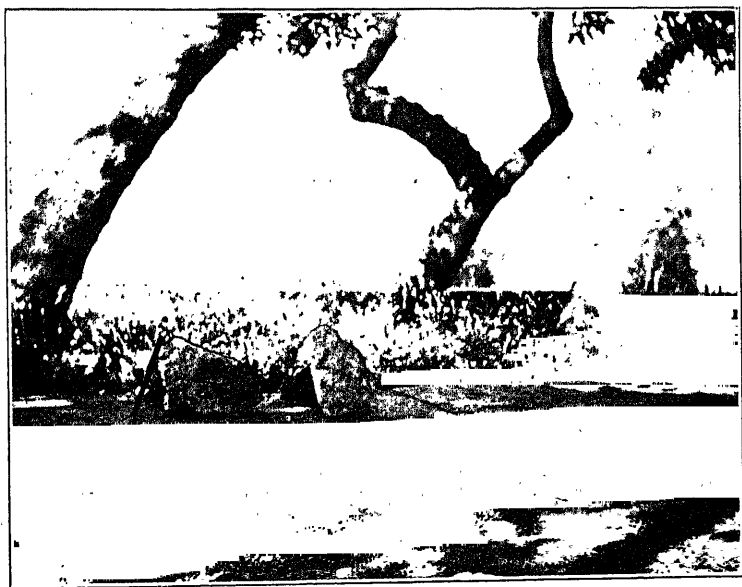
The text thus restored is merely an abbreviated form of the typical inscription of the series, *containing everything essential, but nothing more*, and with the important addition of the Sedeq-yaton clause. It will be seen that I supposed the lost fragment to have contained eight letters in each of the first two lines, and seven in the third—which is written and spaced throughout somewhat more boldly than the other two.

It is not often that a conjecture of this nature receives such speedy confirmation as did this one of mine. Dr. Moulton, to whom I had sent my restoration of the inscription, mailed to me on the 16th of July a number of photographs which he himself had taken in Beirut and Sidon. One of these was a very clear reproduction of the right-hand fragment of the stone here described, showing the ׀ of the word צִדְנִים in the first line so distinctly that there could be no doubt whatever in regard to it.¹ Another, which aroused my interest much more strongly, was a photograph of two small fragments of limestone bearing Phoenician characters. Regarding these Dr. Moulton wrote, that they are

¹ Concluding, of course, that the ׀ was carved by mistake instead of ׀. The mistake is an extremely easy one in the Phoenician alphabet. The overlined letters are those which must have occupied the space (now blank) at the beginning of the first line on the large fragment.

² Schröder, cited by Winckler, *l. c.*, reads (or conjectures?) אִת at this point.

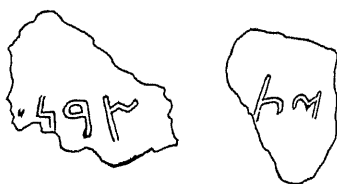
now in the museum of the Syrian Protestant College in Beirut, whither they were brought at the same time with the Bod-‘Astart inscription. They are of the same limestone as the larger pieces, but have not been supposed to be related to them in any way. One of the two fragments contains the letters צדנ and part of the following ם; the two letters on the other Dr. Moulton thought might be יל. I subjoin a reproduction of his photograph; the fountain-pen leaning against one of the fragments serves to show their size.¹ It was at once plain to me—and I



think no one will dispute the conclusion—that these are *pieces of the missing fragment*. The one containing the word צדנם originally joined immediately on to the beginning of line 2 (where the end of the letter ם is still plainly to be seen!); the other, containing the letters ית (not יל), joined immediately on to the beginning of line 3, the letters forming the latter part of the word

¹ Unfortunately, the stones were photographed in the shadow; and as the letters have lost much of their distinctness in the process of reproduction in half-tone, the result is not very satisfactory, even in the best impressions from the plate. Still, the practised eye will generally be able to make out every one of the characters.

אֵית. It will be seen from the photograph, and from the drawing which I append, that the Phoenician characters of these two small fragments are exactly the same, in form and size, as those of the main inscription. No one will be surprised that the



pieces do not exactly fit on to the larger stone; it would be a miracle if they did, in view of the rough handling which the original block must have received. The strange thing is that any part of the shattered end should have been preserved. It is possible, of course, that pieces were purposely broken off, and reduced in size, by the workmen who found the stone, with the aim of making as many separate 'inscriptions'—and thus as much money—as possible. This has often been done, to the sorrow of archaeologists.

The complete inscription, restored with the aid of the new material, reads as follows. Letters supplied by conjecture I have enclosed in square brackets; those which are indistinct have a dot above.

מלך בדעשתרת מלך צִדְנָם¹, בן צדקיתן מלך מלכ
 [ם מלך] צִדְנָם, בן בן מלך אשמנעזר מלך צִדְנָם,
 [אש בן א]ית הבת ז, בן לאל[י] לאשמנ שר קרש.

"The king, Bod-'Aštart, king of the Sidonians, son of Sedeq-yaton, king of kings, king of the Sidonians, and grandson of the king Ešmun'azar, king of the Sidonians; he who built this house; he built it for his god, Ešmun, the Holy Lord."

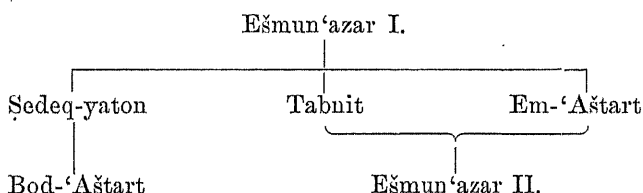
Line 1. The head of the ה in צִדְנָם is fairly distinct in the photograph. Not one of the preceding letters can be made out, as the stone is badly damaged here. The first letter on this fragment was probably the ה in עשתרת.

The name Sedeq-yaton, "Sedeq gave," is itself interesting. This is the plainest instance, thus far, of the use of צִדְק (the

¹ I have substituted □ for the ך of the original.

Σιδων of Philo. Bybl.) as the proper name of a god.¹ We had already צדקמלך on Phoenician coins, and the names צדקאל and צדק־כר in South Arabian inscriptions. With these might also be compared the מלכ־צדק of the Old Testament; see Moore, *Commentary on the Book of Judges*, p. 15 f.

The important fact, however, is that Bod-‘Aštart’s father occupied the throne of Sidon. If my previous conclusions are justified (and especially the conclusion that the temple on the Auwali is mentioned in the Ešm. inscription), it would follow that Sedeq-yaton was the *elder* brother of Tabnit, and reigned before him. This is decidedly the easiest supposition, moreover, in view of what we know of the respective ages of Tabnit and his son Ešmun‘azar at the time of their death; see my former article, pages 168 f. The order of the kings of this dynasty, as we know them, would accordingly be: Ešmun‘azar I., Sedeq-yaton, Tabnit, Bod-‘Aštart, [Em-‘Aštart and] Ešmun‘azar II. The genealogical table would have the following form:



As to the grandiloquent title, “King of Kings” (!), here applied to Sedeq-yaton, it is of little use to conjecture, but it was probably mere verbal glory. Titles cost nothing, especially when they are intended to be buried straightway in a stone wall. It may be that Bod-‘Aštart wished here to assert *his* father’s preëminence over Tabnit, the father of his younger cousin (and rival?) Ešmun‘azar, whose mother, the priestess and queen Em-‘Aštart, was undoubtedly very influential in Sidon. But such guesses as this have little value.

Line 2. The final □ with which I have begun this line can-

¹ The names צדית and יתנצר are well known. From the difficulty of finding any satisfactory etymology for the name of the god צד, one is tempted to conjecture that it is merely an abbreviated form of צדק.

not have stood at the end of line 1; its presence there would have made the line much too long in proportion.

The ם in the first צרנם is practically certain. Both ends of the letter are preserved.

Line 3. I do not see how there can be any doubt as to the way of beginning this line. Compare especially the second inscription published by Berger, where the אית הכת ז at the end *must* have been preceded (and governed) by the verb בן. See above, page 213.

I may perhaps be permitted to call attention to the way in which this inscription supports my division and interpretation of the other. The clause בצרן ים משל is omitted bodily, and the bare possibility that משל might have been construed with אש בן, instead of with what precedes, is thus finally removed. The fact that there is a pause after ז, and that הכת is governed by the preceding verb, not by the following, appears as plainly here as in the second Paris inscription (which *ends* with the word ז). And finally, the omission of the word-complex וצרנשר here shows that whatever it contained was of only minor importance (as my former translation also regarded it). That it could not have contained the name Sidon seems to be beyond question.

Postscript. The above was already in type when the *Revue Biblique* for July, 1903, containing Lagrange's "Nouvelle note sur les inscriptions du temple d' Echmoun," pp. 410-419, came into my hands. Lagrange offers some new suggestions relative to the interpretation of the Bod-'Aštart inscription, and then appends a brief discussion of the new member of the series, the restoration of which I have attempted above. He gives the text of Schröder, supposing the inscription to be complete at the right hand, and to have begun with the words [ברעשתרת] (ובן; but appreciates the great difficulties which attend this reading, and states forcibly the chief among them. He gives interesting and important extracts from a letter written by Schröder, who has examined the stone itself. Two sentences in particular, regarding the doubtful characters in the first line, call for special comment. After remarking that the first distinct letter is ך, Schröder proceeds: "Elle est précédée par un trait qui ne

peut être que la haste du *taw*, lettre finale du nom ברעשתרת, fondateur du temple d' Echmoun." And a little further on: "Sur la photographie de l'inscription on voit entre le *waw* et la haste du ך final du nom de Bodachtoresh un trait qui peut induire en erreur les savants qui n'ont pas vu la pierre ni l'empreinte en papier de l'inscription." With all respect for the authority of so experienced and careful a witness as Dr. Schröder, and with due appreciation of the fact that I have seen neither the stone itself nor a squeeze of the inscription, I must nevertheless record my own conviction that the shaft



("haste") of the letter in question is not that of a ך. In both of the photographs in my possession the line is distinctly *curved* (precisely as I have drawn it), forming the exact counterpart, in both shape and length, of the shaft of the ך which follows in the word בן. Would Schröder have thought of the letter ך here if it had not been for the supposed necessity of filling this space with the name Bod-'Astart? As for the misleading line "between the ך and the shaft of the ך" against which he warns us, it is plainly to be seen in one of the two photographs which I have. It forms the downward continuation of the

upper vertical stroke of the 𐤅 (though swerving slightly from its direction), and ends at a point about half-way between the middle points of the shafts of the 𐤅 and the 𐤅. It is so evidently the result of accident that I omitted it in my fac-simile, and chose, for the sake of caution, to leave the upper stroke of the 𐤅 unfinished. That I was right in so doing seems now to be proved by Schröder's valuable testimony.

10.5

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